DOCUMENT RESUME

ED 137 017 RC 009 795

AUTHOR Wheelock, Warren H., Ed.
TITLE Learning Activities and Resource Units: Intermediate 4-8. [Arizona] Migrant Child Institute.
INSTITUTION Arizona State Dept. of Education, Phoenix.
PUB DATE 77
NOTE 112p.; Instructional materials in this publication were prepared by teachers and administrators who attended Migrant Summer Institutes since 1973

EDRS PRICE MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS Career Awareness; *Centers of Interest; Class Organization; Cultural Awareness; Definitions; Elementary Education; Evaluation; Individualized Instruction; Intermediate Grades; *Learning Activities; *Learning Laboratories; Metric System; *Migrant Child Education; *Resource Units; Student Projects; *Teacher Developed Materials; Unit Plan

ABSTRACT

A requirement of Arizona's Migrant Teacher Institutes was the preparation of instructional resource units. Development of these units was a key element in the three-stage recommendations related to individualizing instruction in both reading and oral language. The three stages were: Room Organization--Realistic Learning Centers, Unit Themes and Committee Activities, and Individual Conference and Record Keeping. This book consists of two of these stages: Room Organization--Realistic Learning Centers and Instructional Resource Units. Part I covers: what a learning center is; how to begin learning centers; suggested learning centers in the areas of language, math, science or health, art, music, and audio-media; and how to evaluate learning centers. Prepared by teachers and administrators who attended Migrant Summer Institutes since 1973, the nine resource units are intended for the intermediate grades, 4-8. Each unit consists of: goals, objectives, motivational activities, sub-topics, evaluation, and concluding activities. Unit topics are: Japan; Arizona citrus; Pinal County, Arizona; career education (banking); corn (its history and uses); metrics; Africa; first aid; and weaving, creative stitchery, and spool knitting. (NQ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED137017

MIGRANT CHILD INSTITUTE

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

LEARNING ACTIVITIES AND RESOURCE UNITS

INTERMEDIATE 4-8

INSTITUTE THEMES:

ORAL LANGUAGE
DEVELOPMENTAL READING
INDIVIDUALIZED INSTRUCTION

ARIZONA
DEPARTMENT OF EDUCATION
MRS. CAROLYN WARNER, SUPERINTENDENT

RC009795

INTERMEDIATE 4-8

The RESOURCE UNITS (Instructional Materials) in this publication were prepared by teachers and administrators who attended Migrant Summer Institutes since 1973.

Carolyn Warner
Superintendent of Public Instruction
Arizona Department of Education

Dr. J. O. "Rocky" Maynes, Jr.
Director, Migrant Child Education
Arizona Department of Education

Dr. Nicholas J. Silvaroli
Director of Reading Education
Arizona State University

Edited by Dr. Warren H. Wheelock, Director, Reading Clinic, University of Missouri, Kansas City, Missouri.

1977

TABLE OF CONTENTS

INTRODUCTION

PART I -- ROOM ORGANIZATION: REALISTIC LEARNING CENTERS
WHAT IS A LEARNING CENTER
HOW TO BEGIN LEARNING CENTERS
SUGGESTED LEARNING CENTERS
EVALUATING LEARNING CENTERS
INSTRUCTIONAL RESOURCE UNITS
A. A TEACHER'S GUIDE
B. INSTRUCTIONAL RESOURCE UNITS

PART II- INSTRUCTIONAL RESOURCE UNITS
INTERMEDIATE 4-8
FOURTH TO SIXTH GRADE LEVEL
JAPAN (1973)
ARIZONA CITRUS (1974)
PINAL COUNTY (1974)
CAREER EDUCATION: BANKING IT (1974)
CORN: ITS HISTORY AND ITS USES (1976)
METRICS: A "LITER" BIT EASIER (1976)
SEVENTH AND EIGHTH GRADE LEVEL
AFRICA, LAND OF CONTRASTS (1973)
FIRST AID (1976)
WEAVING, CREATIVE STITCHERY, AND SPOOL KNITTING (1976)

INTRODUCTION

One of the requirements of Arizona's Migrant Teacher Institutes was the preparation of Instructional Resource Units. Development of these units was one of the key elements in our three-stage recommendations related to Individualizing Instruction in both reading and oral language.

The Institutes attempted to train participants in the implementation of individualized instruction by recommending the following stages:

Room Organization: Realistic Learning Centers
Unit Themes and Committee Activities
Individual Conference and Record Keeping

Main concerns under the heading *Room Organization* consisted of establishing various Realistic Learning Centers in each classroom. These interest-work centers should consist of an art area (paper, magazines for cutting, etc.); an audiovisual area (filmstrips, records, headset for listening, etc.); a library area (paperbacks, hard cover books, etc.); a general area (reference materials, mural making, etc.) Obviously, the type of learning center will depend on teacher-pupil interests.

Unit Themes and Committee Activities were designed to build upon the interests of teachers and children. They were also designed to provide general curriculum content expectations for respective age and grade levels. For example, if a sixth grade class is expected to learn about Europe, a Unit might be selected (depending on teacher-pupil interest), to develop, in depth, one aspect of this major curriculum area. This greatly expands the traditional textbook approach.

The final recommendation was to encourage teachers to schedule *Individual Conferences* and maintain records. The Individual Conference (teacher to pupil or teacher to small group) and teacher-made records of the events taking place during the conference are by far the most important component. As the children develop a reasonable level of independence with Unit activities and the ability to function in learning centers, the teacher then has the opportunity to schedule conferences to guide the children in their learning process.

This book has two main parts: *Room Organization: Realistic Learning Centers* and *Instructional Resource Units.* It is believed that these teacher-pupil learning activities will significantly improve Migrant Education Programs.

N. Silvaroli

PART I

ROOM ORGANIZATION:

REALISTIC LEARNING CENTERS

ROOM ORGANIZATION: REALISTIC LEARNING CENTERS

WHAT IS A LEARNING CENTER

"Learning Centers" or stations, as used in a self-contained classroom, are designated areas within the room where children may go to do specific activities related to some new concept or skill reinforcement. "Interest centers" are non-academic areas where the child's imagination and interests can be explored.

Each center may have one or more activities in a related subject area. Such activities might be sequential in development or multi-level, geared to varying abilities within the class.

In self-contained classrooms, these centers are in operation for only part of the day. The remainder of the schedule is in operation for only part of the day. The remainder of the schedule is devoted to small group instruction and independent study in the upper grades. The primary grades usually use learning centers for a much shorter time each day.

Every activity at each center is basically self-selecting, self-motivating, self-pacing and self-correcting. The emphasis for learning is put on the child rather than the "all knowing" teacher.

Directions at the centers are passed to the child in the form of charts. The use of a tape recorder is beneficial to slow readers and to the child in the primary grades.

The child's responsibility is to select the center, read the chart, complete the activity, and check his own paper, making any needed corrections. The teacher's responsibility, aside from planning, is to evaluate the results of each activity.

HOW TO BEGIN LEARNING CENTERS

A good introduction to learning centers is through the use of interest centers. The children select the interest center they want to use after seatwork activities are completed. Since this system may be unfair to slow workers, the interest centers might be expanded to include reinforcement activities in curriculum areas. Until there are enough activities for each child to be occupied and still have free choice, a definite time can be allotted on the schedule allowing everyone to work at the centers.

At this point, the concept of self-selection, self-pacing and self-correction should be explained to the class. A work folder can be given to each child in order to keep completed papers together for evaluation. Once the class becomes accustomed to working at centers, a group conference can be held for evaluation of total acceptability and progress.

The next step in developing progressive centers is to introduce a sheet of required and optional activities. The children use this sheet as a guide to the centers each week. It also gives the teacher a check for evaluation and a record of the child's required activities over a period of time.

As the class becomes accustomed to working at centers, the time allowed can gradually be increased and more activities added.

Sequential centers can be developed from resource materials such as Weekly Reader, Continental Press, and Scholastic Press. Teacher-made materials can come from dictionaries and encyclopedias.

Areas other than textbook materials can be utilized in learning centers. For instance, food store ads can be used to reinforce arithmetic concepts, telephone books aid in alphabetization, and catalogs can produce order forms and check writing. Greeting cards can be used to spark interest in writing rhymes and poetry, magazine ads for critical thinking, and Sunday cartoons for reading in sequence and writing conversation. To develop listening skills, directions can be put on tape for filling in a map grid, and stories can be taped for comprehension. Many activities can be put in the form of games such as Concentration for vocabulary and Scrabble for spelling words. Rather than using a spelling text each week, individuals can be encouraged to review their own papers for misspelled words, on the basis that they will learn rather than memorize words that have meaning to them.

Science experiments from simple to complex can be taught through use of charts and tapes. The practice in following precise directions alone is a skill to be developed. Map and globe skills are readily adaptable to the learning center concept as are organizing and outlining skills. The more you begin to gear your thought toward teaching through charts, the more ideas you come up with.

SUGGESTED LEARNING CENTERS

I. LANGUAGE ACTIVITY CENTER

A. Prove-it game – Have children call out other foods. They say – munching mouth-tomato/no or munching mouth-meat/yes.

B. A-B-C order – Children put words that were written on board in alphabetical order.

C. Language Experience.

1. Each child dictates ingredients they think it takes to make marshmallows. Later they can read ingredients written on bag (or the teacher can read for lower levels).

2. Children can write poems about marshmallows.

3. Children can write about the experience of eating a marshmallow or other foods.

D. Beat-the-clock game (using teacher-made large clock) – Small group of children use the clock alone with words that were written earlier on board. Child spins and makes up sentence corresponding to numbered word on board.

Student activity can vary by:

1. telling how sentence ends;
2. telling how many syllables there are in the word;
3. telling how many vowels are in the word;
4. making up a sentence using the plural form of the word.

E. Fish – Students play fish card game. Words can be those mentioned already. You can also use other words beginning with M.

F. "M" or Food Booklet – Children cut out pictures from magazines. They may be allowed to draw them too. Labeling should be encouraged.

G. What Am I? game – This may or may not be a teacher directed activity.

1. Teacher describes a food. Child guesses.
2. Teacher describes food or consonant "m" words on tape. Child responds. After a short time, correct answer is heard. If right, child might take a turn. If wrong, the children continue to listen to tape.

H. Children may add words they learned by writing them in their own word book.

I. Children may work on worksheet from lesson No. 1 (Mr. M.)

J. Grab Box – This is a large box with opening large enough to insert hand. This box may be filled with beginning M-items, food items, etc., (masking tape, money, map, mitten, milk carton). Child inserts hand and then writes down what he picked up without seeing it.

K. Spelling – Children can spell the foods Mr. M. liked or other foods by using link letters.

L. Letter Writing – Since Mr. M. liked to eat so much, children can be directed to write a letter inviting him to their lunch. Children might write letters inviting their parents to a luncheon.

M. Days of the Week – Have children make up menus for every day of the week.

N. Cloze Technique – Using this technique, have children read a story, filling in the blanks.
Example: Mary went to the grocery store to buy some _____ and _____. She saw many _____ she liked. She looked at different _____ before she decided on buying _____ too. Mary had _____ dollars with her. Her bill came to _____ dollars.

O. Following Directions – Children are given opportunity to follow directions by making jello, popcorn, etc.

P. Learning Colors – Using plastic fruits that are numbered, child writes down the color or uses construction paper to match color.

Q. Show and Tell – Have children share what they ate for breakfast.

R. Communication Skills – Have children use the telephone. They pretend they are calling in a grocery order. Another child can record the order.

S. Role Playing – Children can play the role of a grocery clerk, customer, bag boy, etc.

T. Consonant Answerboard – Cut out twelve pictures of foods and paste on tag boards. Cut out 12 rings putting a consonant or consonant blend on each one. Student puts ring with the consonant on picture that has same beginning sound.

U. Tick-tack-toe – This can be either teacher-directed, taped, or cards can be made up with answers on back. Questions asked are about foods. Example: What kind of food is a banana? What vitamin is found in carrots? etc.

V. Developing Sight Vocabulary (for children having difficulties)
Word Shapes – Prepare a master or put list on chalkboard. One list of words, another list of shapes.

Example – milk
beets
peas
bananas

W. Word Attack Skills – Mimeographed sheet on consonants, consonant blends, etc. Words are food words.

X. Vowels

1. Mimeographed work on food words. Child is to pick out vowels.

2. Prepare box (can be used for other words) and put numbered pictures of foods. Child shops by picking out picture and telling what vowel rule applies.

Ex. 1. Short word with vowel at the end – vowel is long (he).
Ex. 2. Short word with vowel in middle – vowel is short (got).
Ex. 3. Two vowels together – first one is long, second is silent (peach).
Ex. 4. Other vowel sounds (oo, aw, al, etc.).
Ex. 5. R-controlled vowels.

Y. Telephone Directory Skills – Have children look up names of Grocery Stores in your community.

II. MATH CENTER – (from simplest to highest)

A. Have children count how many marshmallows were eaten in class.

B. Make up problems using the marshmallows in addition, subtraction, multiplication, etc., problems.

C. Play money available. Children may work out money problems.

D. In higher math, children can estimate cost of a food commodity from growing it, packaging, and processing, wholesale, retail, etc.

E. Have children use egg cartons as registers with play money. Have them learn how to make change.

F. Write the ABC's and have children number each letter. (1-26) List at least 20 food words by using numbers. The children can decode. They may also add what that word totals up to.

Ex:		Total
16 + 5 + 1 + 18 =	pear	40
16 + 5 + 1 + 19 =	peas	41

G. Estimating – Put beans or seeds in jars, have students count them. One closest without going over wins.

H. Clock Activity – Have children record how long it takes to cook food. Ex: Boil eggs, make popcorn, how long it takes bread to rise, etc.

III. SCIENCE OR HEALTH

A. Have different foods, pictures of foods, etc., for the following purposes.

1. Distinguishing likenesses and differences.

2. States of matter (teacher or aide can oversee this activity).
Hot plate is used to change solid to liquid or liquid to solid. Ex: Melt square of chocolate, melt marshmallow, use milk and pudding mix to make pudding.

3. Have children write a well-balanced diet.

4. Have children examine tooth model and tell why fruits are better for our teeth than sweets.

5. Have children classify foods according to sweet, bitter, salty or sour.

6. Seasons – Have children write or draw pictures of seasons along with foods customarily eaten at that time of the year
Ex: turkey–Thanksgiving; ham–Easter.

IV. ART CENTER

A. Macaroni Art – Children make pictures, pencil holders, necklaces, jewelry boxes, etc.

B. Puppets (paper bag) – May be used for a supermarket skit.

C. Student uses his name to write, cut pictures or draw pictures that represent letters in his name. Some letters won't apply.

Example

Folded Construction Paper
cut between letters

picture glued inside
B I L L

banana lemon lime

V. MUSIC – CORRELATE WITH ANY OF THE FOLLOWING AREAS.

A. Songs about foods. Ex: Creative movement while corn is popping.

B. Softness and loudness of foods.
Children react to foods that are noisy by clapping their hands. Ex: Potato chips-clap; Eating a banana-silence.

C. Ask music teacher for songs having food words.
Ex: "Don't Sit Under the Apple Tree"

VI. AUDIO-MEDIA CENTER

A. Language Master – Teacher-made language patterns with pictures of foods to correspond with sentence.

B. Books – Books at various levels dealing with foods, cooking, shopping tips, etc.

C. Films – Films relating to foods, eating habits, table manners, etc.

D. Tape Recorder – Have children record sounds made by crunching or munching foods. Ex: potato chips, popcorn, etc.

E. Filmstrips.

F. Previewers.

G. Headsets.

H. Record Player.

I. Cassette Player.

EVALUATING LEARNING CENTERS

Evaluation can be conducted in several ways. One technique is to have a work folder for each activity at the center. Completed papers are put into the folders and the teacher may collect and evaluate the papers from time to time. Care must be taken not to compare one child with another while checking the papers from one center. The advantage of this technique, however, is the instant check to insure that everyone understands the concepts of the particular activity. Seeing an individual or group who has done poorly gives the teacher an opportunity to meet and go over the activity immediately, thus reinforcing correct responses.

Another technique is to have each child carry his own work folder as he moves from center to center. Using this approach, the teacher may evaluate the folder at any time or have a conference with the child. If scheduling can be worked out, conferences are very worthwhile in setting individual goals and giving each child the responsibility for keeping his own work neatly together.

A sign-up system at each center can be used where a child signs his name and marks which activity he has completed. In this way a check of who has been to each center can be kept.

We have found that the high achiever in a regular classroom situation is not always a high achiever in learning centers. Children become so accustomed to having everything planned for them and everything explained to them, that the sudden freedom of choice and shift of responsibility takes time for adjustment.

In another case, you may have a slower student, in the traditional setting, falling into the learning centers with such enthusiasm that he may surpass his previous work. The freedom of movement alone gives the students incentive to learn, ability to work in pairs or small groups; and to come up with correct responses gives them added encouragement.

Laziness is easy to spot, and here conferences are used to help the child set personal goals that are within his capabilities. Not all children are going to use learning centers to their best advantage, yet not all children gain each day in a traditional classroom. Close supervision, weekly conferences and small group or entire class discussions on how to improve the centers and some children's use of them eventually brings peer group willingness to try for the best. It takes time, but is well worthwhile.

Once the teacher is comfortable with learning centers, the real benefits begin. To see a child who has previously been lackadasical concerning school, come to school on days when he is ill points out the need for interesting classrooms. Seeing children working together in small groups cooperatively and fairly, is seeing the values we often give lip service to being utilized. Seeing the bright light of sudden understanding appear behind troubled eyes is a reward teachers can and do understand. I am not trying to say that these things never occur in a traditional classroom, only that they seem to be multiplied as a result of creative learning.

INSTRUCTIONAL RESOURCE UNITS

A TEACHER'S GUIDE

Warren H. Wheelock, Ed.D.
Director, Reading Clinic
University of Missouri – Kansas City

The Unit is a series of planned, coordinated experiences organized around a central theme or problem. Basically, there are two unit types:

a. *The Teaching Unit:* The teaching unit is composed of purposeful, related activities organized around aspects of everyday living *significant* to the child. It provides for the integration of learning related to many curriculum areas.

b. *The Resource Unit:* The Resource Unit is a collection of suggested teaching and learning experiences and materials organized around a selected topic or area.

The basic difference between a Teaching Unit and a Resource Unit is one of anticipation or pre-planning. The teacher who has been doing Unit Teaching for several years may have completed two or three Teaching Units and may realize that these continue to be relevant and is using them again – perhaps in a slightly modified form. Nevertheless, the teacher has collected materials and ideas and has sources of information, etc., which can still be used. When this happens, you have a Resource Unit. Or, the teacher may have certain areas in the curriculum that must be covered and then may prepare Resource Units to fill these needs.

The six Resource Units in this publication are organized as follows:

Areas	Comments
I. GOALS	Participants were asked to include several nonmeasurable goal statements. Basically, these statements deal with overall concerns of the Unit.
II. OBJECTIVES	In some instances the objectives are stated in measurable (behavioral) terms. In other instances the objectives are specific but not easy to measure. When developing objectives, participants were urged to establish reasonable outcomes rather than be concerned with a comprehensive series of accurately measured objectives.
III. MOTIVATION	Participants were asked to include specific teacher-directed motivational activities to introduce the Unit. These activities should also be sure to create interest in the Unit.
IV. COMMITTEE AND GROUP WORK	Each Unit presents specific sub-topics which are directly related to the main Unit theme. For example, in the Unit on Japan, under the sub-topic Japanese Art, the participants listed types of art; i.e., calligraphy, Oragami, flower arranging, etc. This was done because it is believed that students need specific guidance and assistance. What art form students select; how they decide to approach the topic; etc., should be the students' concern. However, providing them with realistic alternatives should be the teacher's main concern.
V. EVALUATION	Brief Pre- Post-measures are included in each Unit.
VI. CONCLUDING ACTIVITY	These activities are designed to close the total Unit.

PART II

INSTRUCTIONAL RESOURCE UNITS

INTERMEDIATE 4-8

INTERMEDIATE

FOURTH TO SIXTH GRADE LEVEL

JAPAN

Committee

Janette Dean – Eloy Junior High School
Shirley Mundell – Eloy Junior High School
Gilbert Bowman – Mohawk Valley Elementary School
Linda Green – Maricopa Elementary School

FOURTH ANNUAL MIGRANT INSTITUTE – 1973

JAPAN

I. GOALS

Japan is an exciting island country. We would like our students to gain experiences in both Japan's ancient and modern culture. This unit will give the student the basic physical, geographical, and life style of a group.

II. OBJECTIVES

Given a world map, the students will be able to point to Japan with 100 percent accuracy. They will be able to name five cultural differences between U.S. and Japanese people. They will recognize three occupations based on geographic location.

III. MOTIVATION

A. Karate Exhibition

B. Film – Choose from list in resource area

C. Field Trip – Choose from list in resource area

IV. SUGGESTED COMMITTEE AND GROUP WORK

A. Japanese Art

1. Calligraphy (penmanship)
2. Silk Screening
3. Laquering
4. Oragami
5. Pottery
6. Wood Block Printing
7. Flower Arranging

B. Writing and Drama

1. Noh – drama with masks
2. Kabuki – Active drama
3. Puppet Theatre

4. Haiku Poetry
5. Tanka Poetry
6. Japanese Folk Stories and Legends

C. Preparing a Japanese Meal

1. Preparing rice
2. Using a Hibachi
3. Tea
4. Table setting
5. Using recipes from resource page.

D. Sports

1. Sumo wrestling
2. Judo
3. Karate
4. Baseball
5. Gymnastics
6. Skiing
7. Soccer

E. Holidays

1. New Year's Festival – January 1
2. Children's Festival
   a. Boy's Day – May 5
   b. Doll's Day – March 3
3. Feast of Lanterns (BON) – July 13, 14, 15
4. Flower Festival – February and April
5. Moon Festival – October Harvest Moon
6. Green Week – May

F. Japanese Home Life

1. Customs

2. Family life
3. Gardens
4. Homes and architecture

G. Industry

1. Autos and Cycles
   a. Honda
   b. Datsun
   c. Toyota
   d. Yamaha
   e. Kawasaki
   f. Suzuki
2. Electronics
   a. Sony
   b. Hitachi
   c. Panasonic
   d. Toshiba
3. Photography Equipment
   a. Minolta
   b. Yashica
   c. Mamiya Sekor
   d. Pentax
4. Shipbuilding
5. Textiles
6. Steel Producers

H. Places to Visit (Geography and physical features)

1. Islands
   a. Kyushu

b. Shikoku

c. Honshu

d. Hokkaido

2. Cities (Population, climate, and famous sites)

a. Tokyo

b. Sopporo

c. Osaka

d. Nagasaki

e. Hokkaido

3. Surrounding Waters

a. Japan Sea

b. East China Sea

c. Okhotak Sea

d. Pacific Ocean

e. Japan Current

4. Mountains and Island Waters

a. Japanese Alps

b. Fujiyama

c. Mt. Aso

d. Shimand River

e. Lake Biwa

I. Natural Resources

1. Coal

2. Oil

3. Chromite

4. Copper

5. Lead

6. Zinc
7. Magnesium
8. Sulfer
9. Iron
10. Trees
    a. Camphor
    b. Live Oak
    c. Mulberry
11. Fish
    a. Sardines
    b. Tuna
    c. Salmon
    d. Herring
    e. Mackerel
    f. Pike
    g. Octopus
12. Seaweed
13. Pearls

J. Farm Products
1. Rice
2. Radishes
3. Turnips
4. Mushrooms
5. Sweet Potatoes
6. Potatoes
7. Millet
8. Tea

9. Bamboo
10. Wheat
11. Oranges
12. Peaches
13. Pears
14. Persimmons
15. Oats
16. Barley
17. Rye

V. RELATED ACTIVITIES

VI. EVALUATION (pre-tests — post-tests) See accompanying page.

VII. CULMINATING ACTIVITY

A. Japanese Dinner

1. Dress
2. Food
3. Decorations
4. Entertainment
5. Low tables

B. Display Projects at Library, Open House, or PTA.

C. Field Trip to Japanese Flower Gardens (February) on Baseline Road, Phoenix.

PRE-TEST

1. Japan is a (island, peninsula).
2. Japan is a (continent, country, state).
3. An important industry of Japan is the manufacturing of (watches, shoes, motorcycles).
4. (Karate, basketball, football) is a popular sport in Japan.
5. To show politeness in Japan, you (shake hands, bow, kiss).
6. The most famous mountain in Japan is (Mt. Everest, Mt. Fuji, Mt. Hood).
7. Japan's largest city is (Tokyo, New York, Sopporo).

SUGGESTED RECIPES

Date Won-Tons

Delicious crunchy little pastries easy to make when you have a blender and the commercial Won-Ton wrappers sold in specialty shops. Recipe for homemade Won-Ton wrappers is included, however.

8 ounces pitted dates
½ cup shelled walnuts
2 tablespoons orange juice, frozen
2 tablespoons grated orange rind
4 to 5 dozen Won-Ton wrappers
3 cups oil
confectioner's sugar

1. Cut dates into chunks about 1 inch square. Place in blender one quarter at a time, with one quarter of the walnuts. At high speed blend into finest particles. Turn into a large bowl, add orange juice and rind, and knead into a large ball. Roll into cylinders about one inch long and fold and seal into Won-Ton wrappers.

2. Swirl in oil (in pan) and heat to 375 or until a day-old cube of bread browns (about 1 minute). Fry Won-Tons 6 to 8 at a time until just golden brown. Drain well on paper towel, cool, sprinkle lightly with confectioner's sugar before serving. Serves 12 to 15.

Won-Ton Wrappers

2 cups sifted all-purpose flour
½ teaspoon salt
1 large egg
½ cup water

1. Combine flour and salt in bowl. Make a well in center of the bowl. Combine egg and water, and pour into the flour. Use your fingers to combine ingredients. It's easier. When well mixed and all the flour is absorbed, cover with a towel and allow to rest 20 minutes to one hour.

2. Divide dough in half. Flour the counter. Roll out the halves giving the dough a half-turn occasionally to keep the bottom well floured. Roll dough into sheets about 12 inches square, and cut these into squares 3½ inches or less for the wrappers. They should be as thin as you can make them without tearing the dough. Don't pile to store, as they will stick together. Makes about three dozen.

Resources

Japan Air Lines, Reservations and Information, phone 252-7188.
Free Orient shopping guide (Box 888, Burlingame, California 94010).

1972 Happi Holidays World Festival of Tours Guide. Free. Thirty-two views of Japan, collection of essays on the history, culture, and pleasures of Japan (P.O. Box 618, New York, New York 10011) $2.00.

YKK Zipper Company, Macon, Georgia

Kikkoman Shoya Company (soy sauce), Walworth, Wisconsin.

Kahill and Edmand Travel Agents, Financial Center, Central Avenue, Phoenix, Arizona, 264-0611.

Tang's Imports of the World, 4821 East 20th Street, Phoenix, Arizona, 955-7990.

Asia House, 2310 East McDowell, Phoenix, Arizona, 267-7461.

Oriental Food Center. Food, magazines, and housewares. 3920 Grand Avenue, Phoenix, Arizona, 937-7285.

Valley Cycle Center, 3427 East McDowell Road, Phoenix, Arizona, 275-5474.

Western Honda, 6907 East McDowell Road, Scottsdale, 947-4287.

Tri-City Motorcycles, 2308 East Apache Boulevard, Tempe, Arizona.

Minolita Corporation, Phoenix, Arizona, 266-4734.

Schafer's Camera Corner, Pima Plaza, Scottsdale, Arizona, 945-6609.

Scott Toyota, 7520 East McDowell Road, Scottsdale, Arizona, 945-0761.

ABC Datsun, 7649 Camelback Road, Phoenix, Arizona, 277-7649.

Arizona World Trade Association, 44 East Indian School Road, Scottsdale, Arizona, 946-7959.

Nakamura Farms, 3309 East Baseline Road (Flower Gardens in February), Phoenix, Arizona, 276-1003.

Buddhist Church of Arizona, Reverend Chiken Takeda, 4142 West Clarendon, Phoenix, Arizona, 278-0036.

Japanese American League, 5414 West Glenn Drive, Glendale, Arizona, 931-1985.

Toshiba Television American Appliance Distribution Company, 310 South 29th Street, Phoenix, Arizona, 273-1395.

Panosonic Branch Office, Fuch J. Norman Company, 2334 North 32nd Street, Phoenix, Arizona, 956-3560.

Sony Corporation, San Diego, California.

YMCA Karate Club.

Films – *16 mm., Color, Sound, Free.* Association – Sterling Films, 866 Third Avenue, New York, New York 10022

(Pay only return postage. Book three months in advance)

Agriculture Today in Japan	30 min.
Architecture of Japan	20 min.
Children At Play	19 min.
The Culinary Art of Japan	29 min.
A Family of Tokyo	20 min.
Festivals of Japan	21 min.
Fishery in Japan	28 min.
The Four Seasons in Japan	27 min.
Gardens of Japan	18 min.
Industrial Japan	28 min.
Japan – A Profile of the Nation Today	29 min.
Japan – 1970	29 min.
Journey Through Japan	27 min.
The Language of Japan	20 min.
Life From the Sea	26 min.
Modern Architecture of Japan	28 min.
Schooling for Progress	29 min.
Science and Technology in Japan	29 min.
Two Weeks in Japan	30 min.

Film Free – 16 mm., Color, Sound. Borrower pays return postage. Book eight weeks in advance. Mercury Marine Film Library, 1939 Pioneer Road, Fond du Lac, Wisconsin 54935.

Oriental Odyssey	27 min.

Filmstrip – ASU Library. Encyclopedia Britannica Films, 2429 Teagarden Street, San Leandro, California 94577.

443 – *Farm Village in Japan*

114 – *Guatama Budha: The Enlightened*. One of set "Men Who Made History." (Sound Filmstrip – one)

168 – *Japanese Children*

441 – *Japanese Fishermen*

444 – *Japanese Workshops and Factories*

Resource Materials – Somerton Library

Non-Fiction Books

Japan. R. Boschman. Doubleday, 1964.

Japan. Forrest R. Pitts. Fideler.

Let's Travel in Japan. Darlene Geis. 1965.

They Lived Like This In Old Japan. Marie Neurath. 1966.

Fiction

The Greedy One. Patricia Mizes Martin. Rand McNally, 1964.

The Rice Cake Rabbit. Betty Jean Lifton. Norton, 1966.

Articles: *National Geographic Magazine*

August, 1942	*pp. 225-252*
April, 1944	*pp. 385-416*
October, 1944	*pp. 385-424*
November, 1945	*pp. 513-534*
December, 1945	*pp. 753-768*
April, 1947	*pp. 491-530*
July, 1971	*pp. 121-134*
March, 1970	
September, 1972	

Western Horseman, "Tokyo's Mounted Police." Brad Anseth. June, 1973.

Films – Somerton Library

Bamboo – Plant of a Thousand Uses. (Inter. JR.H.) Distributed by BFA Educational Media.

Moonbeam Princess – A Japanese Fairy Tale. (P) Distributed by Coronet Inst. Film.

Transportation Around the World. (P) (I) Distributed by Coronet Inst. Film.

ARIZONA CITRUS

Linda Morrison – Florence Elementary School
Glenda Vetter – Avondale Elementary School I
Lori Lewis – Florence Elementary School
Shirley Dail – Mohawk Valley
Betty Benton – Frank School, Tempe Elementary District

Unit Grade Level
Kindergarten – First

FIFTH ANNUAL MIGRANT INSTITUTE 1974

ARIZONA CITRUS

(Suggested Grades – Kindergarten-First)

I. GOALS

A. To expose the children to a variety of Arizona citrus fruits.

B. To explain what a citrus fruit is and how and where it grows.

C. To compare citrus fruits and other types of fruit.

D. To show differences and similarities in the citrus fruits.

E. To develop the concept: in Arizona, citrus is important to people, and people are important to citrus.

II. OBJECTIVES

A. The child will be able to name six citrus fruits.

B. The child will be able to describe a citrus fruit, how it grows and where it grows.

C. The child will be able to tell the difference between a citrus fruit and other fruits.

D. The child through his sensory experiences will be able to communicate his understanding of the differences and similarities between the citrus fruits.

E. The child will be able to express the importance of citrus in his diet, and that many people are needed to produce citrus.

III. MOTIVATION

A. Have children bring one piece of fruit from home.

B. Display many fruits, including the Arizona citrus.

C. Show films. (see audiovisual list)

IV. SUGGESTED ACTIVITIES

A. Sensory Experiences

1. Peel fruits.

2. Separate sections and count.

3. Find seeds, feel and count.
4. Skin sections and discuss.
5. Smell and taste fruits.
6. Discuss sensory observations.

B. Using Fruits (see attached recipes)

1. Make juices.
2. Bake a Mexican Orange Pie.
3. Cook Mock Orange Pudding.
4. Make Ginger-Candied Grapefruit Peel.
5. Make perfume, bottle and use as a gift.
6. Make pomanders.
7. Any number of prepared mixes from the grocery store can be used.

C. Art Activities

1. Block print with cut fruits.
2. Model fruits from paper mache, clay, etc.
3. Finger-paint with citrus colors.
4. Make a mural of the field trip experiences.
5. Make a collage of citrus fruits, colors, textures, etc.
6. Let children make bulletin boards showing what they have learned about citrus.

D. Reading Enrichment Activities

1. Show and discuss growth from seeds to fruit.
2. Take field trip to citrus grove.
3. Write stories about experiences, feelings after tasting fruits, etc.
4. Have the children do dramatic play about tree growth.
5. Role play activities of workers in citrus related jobs.
6. Reading games (see Teacher References)

V. EVALUATION

Through many of the foregoing activities the children will be able to express the listed objectives.

VI. SUGGESTED PROCEDURES

A. Unit should be used during the month of January which is the harvest month for citrus. Reinforcement activities can be used when blossoms develop later.

B. A culminating activity could be the purchase of a citrus tree and planting it during Arbor Day.

VII. RESOURCES

A. Field Trips

1. Tal-Wi-Wi Ranch
   North Litchfield Road
   Litchfield, Arizona
   Phone: 935-9388

2. Central Citrus Company
   2929 South Priest Road
   Tempe, Arizona
   Phone: 967-8693

3. Mesa Citrus Growers Association
   254 West Broadway
   Mesa, Arizona
   Phone: 964-8615

4. Spencer & Spencer Citrus Development
   Main Office, Main Canal
   Tacna, Arizona
   Phone: 785-3369

5. Desert Citrus Packers
   P. O. Box 4940, KDFA Station
   Yuma, Arizona 85364
   Phone: 726-0630

B. Audiovisual Materials

Films:

1. *The Orange Grower.* (16 min.) Dysart Film Library, No. 3610.

2. *The Story of Citrus Fruits.* (11 min.) Dysart Film Library, No. 3607, Somerton Film Library, No. 64.

3. *Secrets of the Plant World.* (15 min.) Disney, Tempe Elementary.

4. *Seeds Grow Into Plants.* (11 min.) Coronet, Tempe Elementary.

5. *Children of the Fields.* (28 min.) Xerox, Tempe Elementary.

Filmstrips:

1. *Growing a Plant.* (Ed. Media Tec.) Tempe Elementary.

2. *The Story of Fruits and Vegetables.* Avondale Elementary.

3. *Picking Fruit.* Avondale Elementary.

Film Loop:

1. *From Flower to Fruit.* Florence Film Library, No. 564.

Study Prints:

1. Picture Story Set IIC – Sensory Perceptual Learnings (2), Bowmar Publishing Corp., Glendale, California. (citrus fruits)

C. Science Materials

1. *Science: A Process Approach II.* Ginn and Company, 191 Spring Street, Lexington, Massachusetts 02173.
   Module 3, Observing: Color, Shape, Textures and Size.
   Module 7, Observing: Perception of Taste.
   Module 15, Observing: Perception of Odors.

2. *Elementary Science Study.* Webster/McGraw-Hill, Inc. 1221 Avenue of the Americas, New York, New York 10020, *Growing Seeds:* Teachers Guide.

D. Children's Books

1. Crockett, James, *Vegetables and Fruits.* Time – Life Books, New York, New York.

2. Greene, Carla, *I Want To Be An Orange Grower.* Childrens Press.

3. Paulson, Solveig, *About Fruits.*

4. Wall, Gertrude Wallace, *Gifts From The Grove.* Charles Scribner and Son, New York.

5. Hefferman, Helen, *Foods From Here and Far.* (produce and markets).

E. Teachers Books

1. American Guidance Service, *Peabody Language Development Kits.* Levels P and No. 1 (pictures and simulated fruit).

2. *Home Citrus In Arizona.* Bulletin A62, University of Arizona, Cooperative Extension Service and Agricultural Station.

3. Limburg, Peter, *What's In The Names of Fruit.* Coward, McCann, and Geoghegan, Inc., New York.

F. Free Materials

1. Florida Citrus Commission, Institutional and School Marketing Department, P. O. Box 148, Lakeland, Florida 33802.
Request the following: The Orange Clock, Monthly Calendar, Word Picture Story, Four Seasons.

2. Sunkist Growers, Luhrs Central Building, Phoenix, Arizona. Telephone: 252-7294.

G. Appropriate Spanish Words

Orange	(naran'ha)	naranjo
Lemon	(Lēmōn')	limon
Grapefruit	(tōrōn'ha)	toronja
Lime	(lē'ma)	lima
Tangerine	(naranhē'tà)	naranjita – madrinos or naranchitos
Tangelo	(tan'gelō)	tangelo
orange	(anaranha'dō)	anaranjado
yellow	(amarē'ō)	amarillo
green	(ver'de)	verde

H. Reading Games

1. Kaplan, Madsen and Taylor, *Change For Children.* Goodyear Publishing Company, Inc., Pacific Palisades, California.

2. Lorton, Mary Baratta, *Workjobs.* Addison-Wesley Publishing Co., Menlo Park, California.

CITRUS JOBS ARE VARIED

IT BEGINS as a mere trickle. The picking of one fruit after another. Soon, the trickle becomes a mighty river. As it rolls along it brings benefits to many people . . .

People who sort, pack, and process the fruit.

People who operate trucks, trains, and ocean-spanning vessels that deliver the fruit to markets.

People who harvest the trees, convert them into pulp for the manufacture of millions of shipping cartons.

People who produce the gasoline and oils, the electricity, the fertilizers, and the chemicals bought by citrus growers.

People employed in research . . . for citrus by-products, for better fruit varieties, for better cultural methods, for better fruit quality.

People who build the tractors and the multiplicity of other machines used by the growers, packers, processors, and the shippers.

In Arizona citrus is important to people. And people are important to citrus.

(Pictures and text can be used as ideas for bulletin boards.)

Mexican Orange Pie

1 cup and 6 tablespoons sugar
½ cup boiling water
3 eggs, separated
¼ cup unsifted flour
tiny pinch of salt
1½ cups fresh orange juice
1 tablespoon butter or margarine
1 teaspoon vanilla
2/3 cup chopped nuts
1 (9-inch) pie shell, baked
¼ teaspoon cream of tartar

Place the cup of sugar in a heavy skillet and set over low heat, stirring until sugar melts and turns golden: watch carefully, lest it carmelize too much. Stir in the boiling water and blend well. Beat egg yolks until foamy, then beat in flour, salt, and orange juice. Blend gradually with the sugar syrup. Stir over low heat until mixture thickens. Add butter, vanilla, and nuts. Cool slightly, stirring frequently, then turn into the pie shell. Make meringue by beating egg whites and cream of tartar until stiff, adding the 6 tablespoons sugar very gradually. Spread over pie and bake about 12 minutes in a 350 oven. Serve cold. *Makes 8 rich servings.*

Mock Orange Pudding

1 can eagle Brand sweetened condensed milk
½ cup mock orange juice
1 teaspoon grated rind
1 egg, slightly beaten

In a medium-size bowl, combine sweetened condensed milk, mock orange juice, and rind; blend in egg. Pour into dishes or cups.

Ginger-candied Grapefruit Peel

2 cups prepared grapefruit peel
2 cups sugar
2 cups water
1 teaspoon ground ginger
¼ teaspoon salt
½ envelope unflavored gelatine
2 tablespoons cold water

Peel grapefruit and cut peel into strips. Cover with water and boil 15 minutes. Drain. Repeat process twice, with fresh water each time. Measure peel, then combine with sugar, water, ginger, and salt. Place over low heat and cook very slowly until syrup is quite heavy, but *do not* let it carmelize. When peel is tender, remove from heat and add gelatine, which has been softened in the cold water. Stir well to dissolve gelatine. Let stand until cold. Drain peel and roll pieces in sugar. Let dry on waxed paper. This has a different and delicious flavor.

Golden Orange Toast

½ cup undiluted evaporated milk
6 egg yolks
1/3 plus ½ cup orange juice
1 tablespoon plus 2 teaspoons grated orange rind
small dash of salt
pinch of nutmeg
8 standard-size slices bread
3 tablespoons margarine
1 cup light brown sugar, firmly packed

Beat milk and egg yolks together well, then beat in the 1/3 cup orange juice. Beat in the 1 tablespoon grated rind, the salt, and the nutmeg. Dip each slice of bread in this mixture and saute in the margarine until golden on each side: *do not* brown the toast. Serve hot with a sauce made by combining the ½ cup orange juice, the 2 teaspoons grated rind, and the brown sugar. Simmer 5 minutes, stirring constantly. *Serves 4 to 6.*

Skills Classifying; observing different forms of food containing common fruits; selecting words; reading.

ACTIVITY

The child sorts the empty packages onto the appropriate fruit card.

GETTING STARTED

The teacher might discuss the activity as follows: "What is the name of this fruit? And this one? And this one? Take one of the boxes here and look at it carefully. Can you tell what flavor of fruit was used? Good. Where do you think the applesauce should go?"

IDEAS FOR FOLLOW-UP DISCUSSION

Tell me about all the things with apples in them.
Tell me about the things with cherries in them.
Show me a fruit that is orange and is sweet. Show me another fruit that is sweet. What do we call this? Show me a fruit that is *not* sweet. What is it called? How does it taste? Show me a fruit that looks just like this fruit in shape but it is a different color.
Show me a fruit that grows in Africa. One that grows in California. One that grows in Hawaii.
Name all the fruits that are yellow.
Show me a fruit that comes in a bunch. Another one.
What fruit is spelled "b-a-n-a-n-a"?

MATERIALS

10" X 16" pieces of tagboard.
Pictures of fruits.
Glue.
Clear contact paper to protect tagboard and containers.
Marking pen to write names of fruits.
Plastic fruits to match pictures.
Empty food packages that contained fruit or fruit products.

- *Apples:* applesauce, apple strudel, apple pie, apple juice, baked apples, Applette candy bar.
- *Pears:* pear nectar, canned pears.
- *Grapes:* wine, grape juice, raisins, grape jelly, grape chewing gum.
- *Oranges:* orange juice, orange marmalade, orange Jello, orange cake mix.
- *Bananas:* banana cream pie, banana cake, banana muffins, banana nut bread.
- *Cherries:* cherry Jello, cherry cookies, maraschino cherries, cherry cough drops, cherry pie.
- *Pineapples:* canned pineapple slices, pineapple juice, pineapple upside-down cake.
- *Strawberries:* strawberry jelly, frozen berries, strawberry Jello, strawberry cheese cake, strawberry yogurt.
- *Lemons:* lemonade, lemon juice, lemon cookies, lemon cake.
- *Peaches:* peach pie, peach jam, canned peaches, peach nectar.

Contained for cards.
Large container for empty boxes and boxed cards.

PINAL COUNTY

Brenda Mason – Stanfield Elementary School
Johnnie Myers – Maricopa Elementary School
Margaret Templeton – Maricopa Elementary School

Unit Grade Level
Intermediate

PINAL COUNTY

(Suggested for Intermediate Grades)

I GOALS

A. To give the student the opportunity to study various Indian tribes and their cultures.

B. To provide knowledge of type of industries available in Pinal County and how these industries affect the student.

C. To have students become aware of the historical background of Pinal County.

II. OBJECTIVES

A. The student will become more familiar with the history of Pinal County.

B. The student will be able to identify the major tribes of Indians and the culture of these tribes.

C. To have students become aware of the historical background of Pinal County.

III. SUGGESTED MOTIVATION

A. Bring a cotton ball (or use a packaged cotton ball) and a finished piece of cotton material to class to allow the students to feel and see the difference.

B. Obtain Indian basket or picture of one and ask how this basket resembles grass.

C. Secure a jar of water, some dirt, and some grass and purchase an adobe brick to show the use of dirt and grass in the making of homes.

D. Plant some cotton seeds in one-half gallon milk cartons and allow children to plant, water and watch grow.

IV. SUGGESTED GROUPS

A. Indian tribes.

1. Pima
2. Papago
3. Maricopa

B. Industry.

1. Agriculture

2. Mining

3. Livestock

V. SUGGESTED ACTIVITIES

A. Using a large map of Pinal County on the bulletin board, show crops grown and their location, using bright colored yarn from article to location on the map.

B. Make Indian popovers.

C. Let children listen and dance to Indian music.

D. Have students list use of cotton.

E. Make replica of Indian housing, using clay, grass, small sticks, paints and one-half pint milk cartons.

F. Using any media available, draw picture showing use of cotton.

G. Make a mural showing different kinds of crops grown in Pinal County.

H. Make a pictograph for others to read.

I. Make a dirt table of early Indian life.

J. Get samples of pottery made by Pimas, and the baskets made by Papagos.

K. Using ceramic clay design, paint Indian pottery.

L. Using salt ceramics, make a raised map of Pinal County.

M. Have a wagon train around the room. Have each child draw his own wagon. (Wagons may be constructed from shoe boxes).

N. Make a model of open pit mine. (This activity to be used after trip to open pit mine.)

VI. SUGGESTED FIELD TRIPS

A. Mining Related

1.	ASARCO	836-2171	Casa Grande
2.	Hecla	836-2141	Casa Grande

B. Livestock

1.	Red River Farms	424-3314	(Stanfield)
2.	Benedict's	424-3411	(Stanfield)

C. Cotton

1.	Casa Grande Oil Mill	836-7406
2.	Eleven Mile Corner	723-5694
3.	Best Gin	568-2220 (Maricopa)
4.	Eloy Gin	466-7673

D. History

1.	Casa Grande Hist. Museum	836-2223 (W-F., & Sun. 2-5)
2.	BeDillions Cactus Garden	836-7750 (Casa Grande)
3.	Pinal County Hist. Museum	868-4382 (Florence – W-Sat., 1-5)
4.	Pinal County Courthouse	868-5801 (Florence – W-Sat., 1-5)
5.	Pinal County Tourist Center	868-4331 1012 S. Main–Florence

E. Indians

1.	Casa Grande Ruins	723-3172 (Coolidge–7A.M.–6P.M.)
2.	Gila River Reservation	Sacaton
3.	Gila River Arts & Crafts	562-3411 Sacaton
4.	HoHoKam Museum	723-4796 1035 S. Az., Blvd., Coolidge)

VII. REFERENCE MATERIALS

A. Teacher Reference Magazines and Newspapers

1. *Arizona Highways.* 2039 West Lewis Avenue, Phoenix.
2. *Arizona Republic.* Friday, March 3, 1972, P. 52, History of Pinal County.
3. *Casa Grande Dispatch.* Wednesday, June 26, 1974, "Cotton Issue."
4. Pamphlets from Chambers of Commerce of Casa Grande, Coolidge, and Florence. (Obtain from City Hall of each town.)

B. Books for Young Readers

1. *Arizona Adventure.* Madelin Pare' and Bert Fireman, Arizona Historical Foundation, 1967.

2. *The American Indian as a Farmer.* Loverne Morris, Melmont Press, 1963.
3. *The First Book of Indians.* Benjamin Brewster, Franklin Watts, Inc., 1950.
4. *What Indian Is It?* Anna Pistorius, Follett Publishing Co., 1956.
5. *Dancing Cloud.* Mary Beff, Viking Press, 1958.
6. *Cliff Dwellings.* C. B. Colby, Coward McCann, Inc., 1965.
7. *The Art of the North American Indian.* Shirley Glubok, Harper & Row, 1964.
8. *The First Book of Copper.* Olive Burt, Franklin Watts, Inc., 1968.
9. *Cotton-From Farm to Market.* Winifred Hammond, Coward McCann, 1968.

C. Teacher Reference Books

1. *These United States.* Reader's Digest Association, pages 74, 80 and 86.
2. *Southwest Indian Craft Arts.* Clara Lee Turner, University of Arizona Press, 1968.
3. *Arizona Place Names.* Byrd Grange, University of Arizona Press, 1960.
4. *Arizona, Its People and Resources.* Jack Cross and Elizabeth Shaw, University of Arizona Press, 1959.
5. *A Pima Remembers.* George Webb, University of Arizona Press, 1959.
6. *Sunland Seer, Story of Charles D. Poston.* Al Gressinger.
7. Arizona Room, Hayden Library, Arizona State University, Tempe. Various books on Arizona history.

D. Films to be Ordered from the Florence Library. These are (I-J).

1. Indian heading, No. 970, *Maps, Indians, U.S. Reservations.*
2. Cotton heading, No. 633, *Clothing: A Pair of Blue Jeans.*
3. Livestock heading, No. 630, *The Cattlemen.*

E. Films to be Ordered Through Central Arizona Film Cooperative
ASU Films

1. *The Cotton Farmer.*
2. *Cotton-From Fiber to Fabric.*

3. *Cotton-Nature's Wonder Fiber.* 25 min.
4. *Indian Artists of the Southwest.* 30 min.
5. *Copper Mining and Smelting.* 30 min.
6. *Copper the Oldest Modern Metal.* 20 min.
7. *The Modern Prospector.* 18 min.
8. *Cattleman – A Rancher's Story.* 15 min.
9. *Meat from Range to Market.* 12 min.

F. Filmstrips to be Ordered from the Florence Library

1. No. 454 (P-I), *The Story of Cotton.*
2. No. 134 (P-I), *Where & How People Work & Live: Clothes from Head to Toe.*

G. Related Activities

1. Lost Dutchman Day – January, Apache Junction, Arizona.
2. Mul-Cha-Tha – February, Sacaton, Arizona.
3. O'Odamtash – February, Casa Grande, Arizona.
4. Western Days – March, Coolidge, Arizona.
5. Pioneer Days – April, Kearney, Arizona.
6. Stagecoach Days – March, Maricopa, Arizona.

VIII. EVALUATION

A. Have each child pick a section of the unit he enjoyed and write a story and draw a picture about it and discuss with class.

B. Using the Indian symbols, have class write a message to someone in the class to be read out loud.

C. Give each student a map of Pinal County and have him locate county seat, major cities, home city, reservations, etc.

SALT CERAMIC

1 cup of table salt
½ cup of cornstarch
3/4 cup of cold water

Mix together in the top part of a double boiler and the whole boiler placed over heat. The mixture is stirred constantly and in about two or three minutes it becomes so thick the whole mixture follows the spoon in the stirring process. It quickly reaches a consistency similar to bread dough, and when it does, it is dumped onto a piece of wax paper or aluminum foil and allowed to cool. When it has cooled sufficiently to be handled, it is kneaded with the hands for several minutes after which it is ready for use. Salt ceramic will harden to a consistency of stone, it does not shrink when drying.

DOUGH RECIPE

3 slices of white bread
3 tablespoons white glue
3 drops of white shoe polish (optional)
3 drops glycerine (optional)

Adding the shoe polish and glycerine makes a better consistency for molding. After trimming off the bread crust, mix other ingredients. Use cooking oil on your hands when you begin to handle the dough, which should have the texture of clay. Bread dough can be stored in the refrigerator for weeks if kept tightly wrapped in plastic. Bread dough may be tinted with food coloring.

INDIAN POPOVERS

3 cups self-rising flour
½ cup lard
1 cup (about) warm water
Lard for frying
Powdered sugar or honey

Combine flour and ½ cup lard. Add water a little bit at a time, mixing until the dough is moist enough to handle. Knead gently, but not too much. Spread a thin layer of lard all over the ball of dough and set in a pan. Cover with a dish towel or foil. Let it rise at least 30 minutes, preferably overnight.

Break off about ½ cup of dough at a time; roll into balls; set on tray. Take one ball at a time, pat and flatten it out between the hands, shaping it into a large circle. It should be as thin as cardboard around the edges.

Have lard for frying at a low boil. Brown popover lightly on one side; turn; brown the other side (about five seconds per side). Serve hot with sugar or honey, or sweets and spread with refried beans.

INDIAN SYMBOLS

The Indians had no written language. They had no alphabet such as we have. The Indians used symbols or signs to send messages to each other. These symbols can be woven into Indian rugs, and hammered into Indian jewelry.

1. Four Ages: baby, youth, man, old man
2. Teepee: temporary home
3. Cactus Flower: courtship
4. Thunderbird: bearer of happiness
5. Butterfly: everlasting life
6. Lasso: captivity
7. Arrow: protection
8. Sun: happiness
9. Eagle Feathers: chief
10. Arrowhead: alertness
11. Saddlebags: journey
12. Crossed Arrows: friendship
13. Medicine Man's Eye: wise
14. Bird: carefree
15. Buffalo Eye: alertness
16. Rain and Raindrop: plentiful crops
17. Sun's Ray: brightness
18. Running Water: life
19. Broken Arrow: peace
20. Hogan: permanent home
21. Thunderbird Track: good prospects
22. Deer Track: plenty of game
23. Bear Track: good omen
24. Rattlesnake Jaw: strength
25. Mountains: abundance
26. Rain Clouds: good sign

A writer sits down to write a story about a large piece of real estate — a state, county or city — and he tells himself he must resist the old cliche that the area is "a place of contrasts, an interesting blend of the old and the new."

But sometimes the cliche is more apt than other, fresher words. So Pinal County, in South Central Arizona, must be called a place of contrasts, an interesting blend of the old and the new.

It is traversed, from north to south, by Arizona's most modern thoroughfare, Interstate 10. And there are Indian trails on the Gila River and Papago reservations that have their origins in antiquity.

There are mining towns — and maybe old Spanish workings — that have completely vanished from the face of the desert and mountain. There are others — Kearny and San Manuel — that are among the world's newest.

There are cattle ranches along the San Pedro, in the foothills of the Galiuros, the Tortillas, the Dripping Springs, the Mescals, the Pinals and Sombrero Butte, where riders handle cattle, in many ways, as they did in the 1880s. Centered around Stanfield are pen feeding and cattle breeding operations where cattlemen are more familiar with vitamins, vaccines and sophisticated marketing procedures than they are with the branding iron and riata.

Pinal County has more future than many old Arizona hands, who like the wide open spaces as wide and open as possible, care to contemplate. West Central Pinal County lies in the pathway of progress — the corridor between Phoenix and Tucson. The existing towns bustle, and there are other towns that, so far, exist only on the plats of developers. The day may not be too far distant when there will be a big legal rowdy-dow to keep Frank Lloyd Wright houses off the upper slopes of Sawtooth Mountain.

Pinal County's early human history is a partial mystery, explored by the archaeologists and anthropologists. South Central Arizona was the center of the vast Hohokam culture that extended from Tucson to Phoenix, from the San Pedro to the Yuma desert. It was flourishing a thousand years ago, a network of villages, fields and irrigation canals, and its central structure was a four-story granary and watch tower. That structure now is the Casa Grande National Monument, on the northern outskirts of Coolidge and flanked by a museum and staffed by park rangers.

Esteban, the Moorish slave and advance man for Fra Marcos de Niza, traveled the San Pedro River en route to the Zuni Villages of New Mexico in 1538. Maybe de Niza followed him into the Pinal country, maybe not. Melchior Diaz went looking for Esteban along the San Pedro and explored the Gila, east and west. The almost legendary padres, Eusebio Kino and Tomas Garces, passed this way two centuries later, along the Santa Cruz River to the Pima villages.

Pinal County — Intermediate

One of a series . . .

The Fascinating Fourteen
Arizona Counties

PINAL

COUNTY,

ARIZONA

Map and story by KEARNEY EGERTON

The storied Gila Trail parallels the Santa Cruz north to its confluence with the Gila and it may have been the most pleasant part of that old route to the West. There was always water in the rivers and the Pimas were generous with food and friendship. It was hot in summer — but not as hot as the California desert that lay ahead. And the warring Apaches had been left behind in Southeastern Arizona.

Garces and de Anza, en route to find San Francisco, traveled the Gila Trail, as did the Mormon Battalion, General Kearny and the Army of the West, the Forty-Niners and Butterfield's Overland Mail. Advance parties of the California Column, marching east, and the First Mounted Texas Rifles, riding west, met near Picacho Peak and fought Arizona's only skirmish of the Civil War.

The natives along the Gila Trail were friendly, but those along the San Pedro were not. They were the Apaches, and the army established posts along the river — Fort Breckenridge, Camp Picket Post, Camp Infantry and Camp Grant. Perhaps there were Indian atrocities, but none matched the savagery of a party of whites, Mexicans and Papagos who marched by night, in April of 1871, to an Indian rancheria near Camp Grant and clubbed to death 108 sleeping Apaches. All but eight of the victims were women.

There were stagecoach stations, too — quaintly romantic in the Western movies but pretty grubby in actuality — at Riverside, Montezuma, Bluewater, Maricopa Wells and Dudleyville.

Old Pinal's cast of characters was as colorful as any created by writers of Western fiction. In addition to the panorama of Indians, leatherjacketed Spanish cavalrymen, 19th Century U.S. soldiers, cowboys, miners, gamblers, migrant gunfighters, Spanish priests and runaway eccentrics there were:

Pauline Cushman, the beautiful Union girl spy who operated with flamboyance behind the Confederate lines and who became a celebrity of sorts in Casa Grande. Once she enlivened a dull afternoon on the main street by horsewhipping a guy who had said something unkind about her.

Charles Poston, the "father of Arizona" and one-time alcalde at Tubac who tried to reactivate the ancient Parsee religion of Persia in Florence. He wanted to build a temple to the sun atop Poston Butte near Florence, but nobody else was interested.

Pearl Hart, Arizona's notorious girl bandit. She and a boy friend stuck up the Globe-Riverside stagecoach, a venture that netted her five years in the Yuma pen. She later went into show biz, laid a gigantic egg and faded into obscurity.

James A. Reavis, the "Baron of Arizona" who almost pulled off the biggest land swindle in Southwestern hitory. A Florence printer named Tom Weedin spotted an anachronism in a forged Spanish document that supposedly supported the baron's claim to most of Central Arizona. The baron wound up, with a very short haircut, in a federal pen in Santa Fe.

Jim Sam, the Chinese gunfighter. A crowd of rowdies thought it would be great fun to "trash" Jim Sam's Florence restaurant, but Jim Sam appeared in the doorway with a six-gun in each hand and a knife between his teeth. There was a mass, unanimous backdown.

Territorial vintage house, Florence

Pinal County's roster of ghosts is impressive, too. Pinal City, where Big Nose Kate went after Doc Holliday, who told her to get lost, and where the second Mrs. Wyatt Earp died of an overdose of drugs and snakehead whiskey. Adamsville, remembered mostly for homicides. Vekol, which banished bars. American Flag, Cochran, Sasco and Copper Creek.

There are wild horses in the San Tan Mountains and artifacts in the ancient mounds of the Hohokam. There are contemporary Indian arts in the new Indian center, just off Interstate 10 near Sacaton, and a new college at Signal Peak. There are javelinas on the outskirts of Florence and historic buildings in town (the state prison is there, too, but it hardly qualifies as a tourist attraction). There are legends of Peralta and Dutchman mines in the Superstititions, gold found and lost, and of Spanish treasure in the Vekol caves. And there is the legend of the Papago Arsenal in the Vaiva Hills of the Papago reservation – a cache of antique weapons hoarded against the day when the Bean People would drive the white man away.

Casa Grande National Monument

Casa Grande claims some of the best Mexican restaurants in the Southwest – a claim hotly denied by the enchilada builders of Florence. The San Francisco Giants own a winter training base – and a towering motel – near Casa Grande and John Wayne owns a Stanfield bull valued at $200,000, not to mention his other cattle and cotton holdings there.

There's a botanical garden at Picket Post mountain, the world-famous Boyce Thompson Arboretum, and another, the world's longest, south of Florence. It's a stretch of highway, the Pinal Pioneer Parkway, U.S. 80-89 between Florence and Oracle Junction, where the desert plants are identified by small signs and where man's intrusion is kept to a minimum. A monument marks the spot where Tom Mix, the famous Western star of the silent movies, was killed in an auto crash.

Weaver's Needle in the Superstitions

CAREER EDUCATION: BANKING IT

Grade Level: Fourth to Sixth

Committee:

Rorie Jan Measure
Dollie Cubler
Bob Lawson
Scott A. Mundell
Bill Johnston
Tom Ralls

FIFTH ANNUAL MIGRANT INSTITUTE – 1974

I. GOAL STATEMENTS

A. To make students aware of a minimum number of occupations within the banking and finance industry.

B. To help the students become aware of the relevance of mathematics to various occupations in banking and finance.

C. To help the students become aware of the relevance of reading in various occupations in banking and finance.

D. To expose the students to consumer rights and protection information.

II. OBJECTIVES

A. Each student will be able to list a minimum of six banking occupations.

1. Activities:

a. The teacher selects one of the pieces of media (film or filmstrip) listed in the resources list. This film or filmstrip should be presented to the class.**

Students should be asked to make a list of as many different jobs as they can discover while watching the media. Students should then be given an opportunity to discuss the different jobs associated with the banking industry in small groups or as a classroom unit.

b. Teacher invites resource speakers (preferably management level) to give an overview of the banking occupations with which they are familiar.

c. Students work with the word hunt puzzle provided and discuss.**

d. Each student or small groups of students are asked to compile lists of as many different banking related occupations as they can. This may be done in a contest format with the individual or group finding the most jobs being declared the winner.**

e. A vocabulary activity based on the words found (job titles) can be run. This activity should be aimed at assisting the students in recognizing that job titles are often highly descriptive of the jobs they name, i.e., what duties the job entails. Students may be asked to take a job title and analyze to determine what duties are involved in the job it names.

f. Students may participate in a creative writing activity based on the above activity. Several "different" job titles from those listed in the appendix may be presented to the students. Each student should then be asked to write a story using the "If I were a _____ I would . . ." format. These stories may then be shared with the class and discussed and/or bound into a book.**

g. Various pieces of banking related tools, equipment and materials are placed in the "bank" along with a list of the occupations that use them. Students are then asked to classify the equipment by the occupation which uses them.**

** Note: Lends to center activity.

2. Evaluation:

Students may be asked to list a specified number of banking related occupations either orally or in writing. Six is a suggested number.

B. Upon request, the student will be able to describe orally or in writing a minimum of two duties related to each of two occupations of the student's choice, to the teacher's satisfaction.

1. Activities:

a. Role playing of each occupation in actual simulated banking situation. Each student would then act out role and duties of various occupations.

b. Pantomime of roles and duties where different groups get an opportunity to participate and guess role and duties.

c. Charades – Where students will write out a certain occupation and duty performed. Each will choose one of these from the entire class and then proceed to play charades.

d. Guest speakers to visit class and explain their various duties.

e. In association with each duty, various office and banking machines must be explained and perhaps demonstrated, exhibited, and used for performance – typewriters, calculators, adding machines, copying machines, telephones, and perhaps dictaphones.

f. Interviewing members of various local banks through field trips and then reporting to class the results of interview and what was learned about occupations and duties.

g. Art – drawing, painting, and/or sketching a person depicting a particular duty.

h. Be interviewed by other students, explain particular duties.

C. Given a simulated classroom economy utilizing checking accounts to pay for various classroom commodities and services, each student will be able to keep and balance his own checkbook with 100 percent accuracy.

1. Give out checks and checkbooks to pupils. Demonstrate how checks are written and how balance is figured.

2. Give pupils a certain amount of imaginary money to begin their checking account. (This can be done as a reward.) They may spend this money by writing checks for certain privileges (free time, first to go to lunch, etc.). Check their accounts for accuracy.

D. Each student will be able to perform the duties of teller at least once to teacher's satisfaction.

1. A field trip to a local bank.

2. A film or filmstrip.

3. Class speaker – a teller.

4. Student group interview of a teller at work, reported back to class, or videotaped.

5. Class discussion of the duties of the different banking jobs.

6. Class discussion of what the qualities of a good teller are, and how to know if the teller has these qualities.

7. Role Play – a bank officer interviewing for a new teller.

8. The class can rate each applicant on the criterion they developed in discussion, and explore possibilities through discussion for measuring competence in areas not adequately covered in an interview. This can lead to an understanding of the *practical uses of tests*, and the importance of some skills taught in school.

9. Game – Players: Teller and customers.

   Materials: A deck of cards, each with a problem that a customer might bring to a teller (such as an unbalanced checkbook, a discrepancy between the statement and his records, a passbook that needs interest posted, overdrawn account, etc.). The teller must then rectify the situation to the customer's satisfaction, using the information presented on the card. If the problem has a definite answer, that can be put on the card for the customer to use to check the teller.

   The cards should cover the various operations the class has studied and can be used to show a student's knowledge of these operations.

10. Using the class bank set-up in the classroom, each child can take his/her turn being a teller for a certain length of time. The student will carry on the duties of teller, keeping the necessary records. The teacher can audit the teller's work for evaluation of mastery of the math skills involved.

E. Each student will be able to read and correctly complete a loan application.

1. Mr. Al Rezoli of the Valley National Bank of Nogales and Mr. Phil Cortez of the Southern Arizona Bank of Nogales will explain to 5th and 6th grade students how to procure a bank loan and the procedure to fill out a bank loan application.

   a. In the evaluation, each student must fill out a loan application.

2. Students will receive and read loan information pamphlets printed by the Valley National Bank, Southern Arizona Bank, Household Finance Company.

   a. Each student will write five critical questions to be answered in small groups of six students.

3. Groups of six students will visit, accompanied by a parent, local businesses which include Grants, Browse Around Furniture Store, Preston Motors, Santa Cruz Motors, and St. Joseph's Hospital, to gain information from the managers on the different kinds of loans and loan application procedures related to the different kinds of businesses. Such matters as interest rates and repossession will be discussed with managers.

   a. Each group will be responsible to make a presentation on their findings to the group. Each member will fill out an application related to the unique concern which he is researching.

4. A glossary of new terms will be established by each student.

   a. Each student will be tested on general terms of the loan application for 85 percent accuracy.

5. Each small group will tape record their conversations with business and banking personnel. Groups will then select what parts are interesting to the entire group.

   a. A set of critical questions will be compiled by the group as a whole, to discuss with their resource persons in a return discussion.

F. Each student will be able to read and interpret a monthly bank statement.

1. Students will visit the First National Bank and Arizona Bank of Nogales to observe methods used to make up a monthly bank statement.

   a. Students will write their observations of such a visit.

2. From the observations, a simulated classroom banking situation will be established relating to check cashing and the resulting monthly bank statement.

   a. Each student will be given a role which he must perform adequately related to this activity.

3. Students will read the Arizona Star and Nogales Herald. They will select 10 items. They will have a $500 balance in their checkbook. They must keep track of their expenditures in order to reconcile their monthly bank statements.

   a. Each student must show 100 percent accuracy on expenditures and check register.

4. In the classroom simulated situation, the bookkeepers in each group will pick up the checks, cancel them, and prepare a monthly bank statement to be returned to the student. Each bank statement will have an error in it.

   a. Each student will locate the error and bring it to the attention of the bookkeeper for correction.

5. Mario Gregory, the Branch Bank Manager of the Valley National Bank, will be available to answer all questions about monthly bank statements.

   a. Students will write a brief procedure of the monthly bank statements.

G. Each student will complete at least one independent research in regard to some aspect of banking, utilizing some reference work(s), periodicals, library books, resource interviews, or other available materials.

1. Activities:

   a. The teacher should collect as many resource materials as possible and place them in a central location in the room. A number of materials are listed in the materials list included in this unit but the teacher should collect any other materials that are available as well. A number of small groups should then be formed within the class. Each group should then be assisted in choosing some banking related topic on which to do research. A list of *possible* topics is provided here but students need not be limited to these choices.**

      (1) What education is required for different careers in the banking industry?

      (2) What is the history of money?

      (3) What is the history of banking?

      (4) What different kinds of banks are there?

      (5) Who owns banks?

      (6) What do bank people think of their jobs?

      (7) What are banks like in other countries?

(8) Where do banks get their money from?

(9) What are the different things a bank does?

(10) How do banks protect their money?

And so on . . .

b. Students should then be allowed to complete their research. Students should be encouraged to illustrate their subject in whatever ways they consider appropriate (drawings, diagrams, models, diaramas, etc.) and to draw from as many resources as possible. Their findings may be compiled in writing, on tape or in any other way the group feels appropriate.**

c. After research is completed, the group should be encouraged to share their findings with the class. This sharing may be by oral or written report, panel discussion, skit, book form, student-made filmstrip or so on. Students may even be asked to design their own center around their topic.

** Note: Lends to center activity.

2. Evaluation:

A teacher or group discussion/critique may be conducted to evaluate the above activities.

H. Students will complete a list of ways reading is used in banking and participate in a discussion based on on-site visitations and resource speakers.

1. Activities:

a. The students shall fill out an employment application obtained from the First National Bank of Eloy, Wally Bolton, Manager.

b. The students shall receive and read an employment contract obtained from the First National Bank of Eloy, Wally Bolton, Manager.

c. In a simulated banking situation, the students will communicate through the use of inter and intra-office memos.

d. The students shall write and distribute a newsletter describing their activities based on a sample newsletter obtained from the First National Bank, Wally Bolton, Manager.

e. The students shall be given training pamphlets on several non-executive banking occupations and summarize job duties.

f. The students shall devise a test, based on above activity, to be used for job placement and promotion.

g. The students shall be given samples of the various forms used in conducting monetary transactions in a bank (i.e., deposit slips, withdrawal slips, etc.).

h. The students shall be given several pamphlets describing the services offered by banks in general and any special services offered by particular banks (i.e., a. How Interest Works, b. First National Gold One.).

I. Students will be aware of various types of loans available from banks and related interest types and rates.

1. Interview a bank manager. (This may be done on tape and played back to pupils.) Ask about the different loans available and the interest rates.

2. Have pupils role-play a situation in which a couple applies for a loan.

3. Give out worksheets with loan situations. Have pupils figure out the interest rates and the type of loan needed.

J. The student will be made aware of the various types of consumer fraud associated with banking and ways to spot and deal with them.

1. The student will be given several sample loan contracts in which the percentage of interest on the loan is determined in several different manners and the students shall determine which is the least expensive and most expensive way to finance the loan.

2. The students shall participate in a role playing situation in which one or more "Bunko" or "Con Game" schemes are shown and explained.

Ex: A student (claiming to be a policeman) asks another student to withdraw a sum of money to be used to catch a thief. After the money is withdrawn, the latter student gives it to the former student (the phony policeman) who then takes off with the money.

Note: Several schemes of this type may be obtained from the local police who may demonstrate it in the classroom.

III. MOTIVATIONAL ACTIVITY

The teacher will compile as much banking information as possible to stir up interest in the class. Then students will view films and visit a bank to be able to set up an actual banking situation in the classroom.

Filmstrips

Foundations for Occupational Planning. Sue Singer, Available from Pinal County Career Education Project.

Job Opportunities Now. Sue Singer, Available from Pinal County Career Education Project.

Cabbages to Kings and Various Things. Bowmar, Available from Pinal County Career Education Project.

The Money Tree. Bowmar, Available from Pinal County Career Education Project.

Keys-Career Exploration Program. Science Research Associates, Available from Pinal County Career Education Project.

The Story of Money. McGraw-Hill Films.

The Role of the Commercial Banking System. U.S. Economy in Action Series, Available from the Joint Council on Economic Education. 50 frames.

The Role of the Federal Reserve System. U.S. Economy in Action Series, Available from the Joint Council on Economic Education. 50 frames.

The Role of Capital Investment. U.S. Economy in Action Series, Available from the Joint Council on Economic Education. 50 frames.

16 mm. Films

Is a Career in Clerical Work for You? Available from the Pinal County Career Education Project. (16 minutes)

Careers: Making a Choice. Available from Pinal County Career Education Project. (15½ minutes)

Find Yourself, Then Your Job. Available from Pinal County Career Education Project. (15 minutes)

Your Job: Applying for It. Available from Pinal County Career Education Project. (13½ minutes)

Available from the Arizona Film Co-op:

Money in the Bank and Out. (Intermediate) Color, (15 minutes)

PROD – DF DIST – CF 1965

Very good. Explains terms and procedures: deposits, checks, interest, loans, money flow. Good preparation for a field trip to bank (or substitute for a trip). The film gives an interesting explanation of how loans and interest works, and how this is involved in the community economy.

Your Thrift Habits. (2nd Ed.) Color (11 minutes) Intermediate.

PROD – CORF DIST – CORF 1964

Very good. Planning and budgeting your money, aimed at children. Specifically deals with short range money goals, long range money goals, fixed and flexible expenses, with specific method for planning. Good jumping off place for math activities of keeping a budget. Teacher would do well to preview so that he or she can use same format for budgeting activity.

Fred Meets a Bank. (Intermediate) Black and White.

PROD – WOLPER DIST GGHT 1963

Good. Basic information. Good preparation for unit. Covers checks, checking account, savings account, etc.

Economics – It's Elementary. (Primary – Intermediate)

PROD – CAHILL DIST – A MS 1965

Concept of "consumers," not banking.

Beginning Responsibility – Using Money Wisely. (Primary – Intermediate) Color. (11 minutes).

PROD – CORF DIST – CORF 1967

Covers elementary concepts, how money developed from trading, etc.

Using the Bank. (Intermediate) Black and White. (11 minutes)

PROD – EBF 1947

Factual material on bank but *dated.*

Resource Speakers and Field Trips

1. James H. Ozment – FHA Financing
2. Mrs. Raymond Arzel – Transamerica Title
3. Walter Wosch – Coin Collection
4. First Federal Savings – Dick Soule Telephone: 836-7429
5. First National Bank – Tom Spies Telephone: 836-8243
6. United Bank – Jere Cook Telephone: 836-8795
7. Valley National Bank – Glenn Ruth Telephone: 836-8271
8. Pacific Finance – Danny Smith Telephone: 466-7344

Kits

Widening Occupational Roles Kit (Work). Science Research Associates, Available from Pinal County Career Education Project.

Math Applications Kit. Science Research Associates, Available from Pinal County Career Education Project.

Career Information Kit. Science Research Associates, Available from Pinal County Career Education Project.

Job Experience Kit. Science Research Associates, Available from Pinal County Career Education Project.

Occupational Exploration Kit. Science Research Associates, Available from Pinal County Career Education Project.

Books

Arnold, P., *Money – Make It, Spend It, Save It.*

Baker, *I Want to be a Bank Teller.* Children's Press.

Elkin, B., *True Book of Money.* Children's Press.

Gass, *Money, Money, Money.* Scholastic.

Gay, K., *Money Isn't Everything.*

Lee, M. P., *Money and Kids.*

Rosenfeld, Sam., *The Story of Coins.* Young Readers' Press.

Smith, K. H., *Money and Banking.*

Travis, *Don't Stop Me Now.* Children's Press.

Welkinson, Jean and Ned., *Come to Work with Us in a Bank.* Children's Press.

Money and Banking in the American Economy. The Council for the Advancement of Secondary Education, 1960, McGraw Hill, Inc.

Workbooks

Using Money Series

Neal, Harry, *Money Masters: Your Career in Banking.* New York, New York, 1961.

Wool, J. D., *Counting My Money, Book I.* F. E. Richards, Pub., Phoenix, New York, 1968.

Wool, J. D., *Making My Money Count, Book II.* F. E. Richards, Pub., Phoenix, New York, 1968.

Pamphlets

Banking: A Student's Short History. 1969.

The Story of American Banking. The American Bankers Association, New York, New York, 1963.

Using Banking Services. The American Bankers Association, New York, New York, 1969.

A PARTIAL LIST OF BANKING RELATED OCCUPATIONS BASED ON THE DICTIONARY OF OCCUPATIONAL TITLES

1. Account analyst
2. Accountant
3. Accounting clerk
4. Adding machine operator
5. Administrative secretary
6. Appraiser
7. Armored car driver
8. Armored car guard
9. Audit clerk
10. Auditor
11. Balance clerk
12. Bank cashier
13. Bank reconciliation clerk
14. Billing clerk
15. Billing machine operator
16. Book supervisor
17. Bookkeeper
18. Bookkeeping machine operator
19. Checking clerk
20. City-collection clerk
21. Clearing-house clerk
22. Clerk typist
23. Coin machine operator
24. Collateral and safekeeping clerk
25. Collector
26. Commodity loan clerk
27. Control clerk-data processing
28. Computer programmer
29. Correspondence clerk
30. Country-collection clerk
31. Coupon clerk
32. Coupon collection clerk
33. Credit analyst
34. Credit authorizer
35. Credit card clerk
36. Currency sorter
37. Computer operator
38. Direct mail clerk
39. Disbursement clerk
40. Employment interviewer
41. Escrow officer
42. Estimator
43. Exchange clerk
44. File clerk
45. Financial analyst
46. Foreign collection clerk
47. Foreign exchange code clerk
48. Foreign exchange trader
49. Information clerk
50. Guard
51. Insurance clerk
52. Interest clerk
53. Key punch operator
54. Loan closer
55. Loan counselor
56. Loan officer
57. Manager
58. Margin clerk
59. Messenger-bank
60. Mortgage clerk
61. Mortgage closing clerk
62. Mortgage processing clerk
63. Mortgage accounting clerk
64. New accounts clerk
65. Operations officer
66. Posting clerk

67. Probate clerk
68. Proof machine operator
69. Reconcilement clerk
70. Records custodian
71. Registered mail clerk
72. Repossessor
73. Reserve officer
74. Reserves clerk
75. Returned item clerk
76. Routing clerk
77. Safe deposit clerk
78. Salesman financial service
79. Secretary
80. Securities clerk
81. Securities trader
82. Sorting clerk
83. Sorting machine operator
84. Statement clerk
85. Stenographer
86. Stock transfer clerk
87. Teller
88. Teller-collection and exchange
89. Teller-head
90. Teller-note
91. Transit clerk
92. Trust officer
93. Trust collection clerk
94. Trust mail clerk
95. Trust vault clerk
96. Vault attendant
97. Vault cashier
98. Vault clerk
99. Vice-President
100. President
101. Wires transfer clerk

Note: This is by no means a complete list but rather a starting point.

BANKING JOB TITLE MAZE

A Z N O T K S E A Z X X S T R N O P K R Z Z T S S
P S G U A R D O P K R Z F I L E C L E R K T W N P
O S R V P K N J K T E U N C P V Q Y D P M U J S K
S L N P L A D P Z Z C E X X Q Q J I N R B A Q L I
T I M M Y Q L O A N O F F I C E R P Z F L O A C J
I M P B C N K C T A R D H E S T I M A T O R L R N
N W B P S Z Q O I U D P V A T F G L P B X P M E A
G M M L I Z Q L A K S T E N O G R A P H E R M T C
C K O D A C P L C Q C D D H L Z L Q R T P E S A C
L Q V M P O J E C A U D N L K A C F A I L S Q R O
E F G H I L J C O K S L M N O P Q R S T U I V Y U
R A N A L L O T U G T E L L E R P A S Q Z D U K N
K Z E N B E U O N D O H I S M D A R E N D E R A T
M A N A G E R R T K D O S C I D O C R K E N P E R
L L O S C O P E A V I B O O K K E E P E R T P E R
S Y M P L E R B N E A U D I T O R S D S R E P O R
T E A C H E R S T A N R E R E P O S S E S O R T V

1. RECORDS CUSTODIAN
2. GUARD
3. FILE CLERK
4. POSTING CLERK
5. MANAGER
6. TELLER
7. SECRETARY
8. STENOGRAPHER
9. AUDITOR
11. BOOKKEEPER
11. ESTIMATOR
12. COLLECTOR
13. LOAN OFFICER
14. ACCOUNTANT
15. APPRAISER
16. REPOSSESSOR
17. PRESIDENT

SUGGESTION TO TEACHER

MAKE DITTO CHECKS FOR USE WITH UNIT

CORN: Its History and Its Uses

Intermediate Level

Committee:

Jo Ann Baughman, E. H. teacher, Gila Bend
Nieves Johnson, Reading teacher, Liberty
Janet Perkins, E.S.L. teacher, Dysart
Adeline Schmitt, Reading teacher, Coolidge
Paul Schwier, Resource teacher, Mohawk Valley

Seventh Annual Migrant Institute – 1976

I. GOALS

Corn has played and presently plays a very important role in the subsistence of the peoples of the American continents. We would like our students to be familiar with the origin and history of corn and to be acquainted with its past and present uses.

II. OBJECTIVES

A. Students will be able to briefly tell the historical origins of the corn plant.

B. Students will be able to name four different ways that corn is prepared for eating.

C. Students will be able to name four different corn-derived products other than food products.

D. Given a picture of the corn plant, students will be able to identify the parts of the plant.

E. Students will be able to briefly tell about one story or legend based on corn.

III. MOTIVATION

A. Students will see film *Corn, The Plant With Ears.*

B. Students will bring ears of "Indian" corn to class.

C. Teacher will read story *The Origin of Corn* to the class.

D. The class will prepare a bulletin board with pictures from magazines, study prints, etc. to illustrate the history, production, and uses of corn.

IV. ACTIVITIES

A. Language Skills Activities

1. Have children select a book from suggested material and report to class.

2. Have children write to chamber of commerce in various Corn Belt states requesting information on corn (especially Mitchell, South Dakota, regarding the Corn Palace).

3. Have children dramatize a legend or story dealing with corn.

4. Show other films from film list.

B. Art Activities

1. Make cornhusk figures; dolls, bushy-tailed alligators, or flowers (Directions in hobby booklet *More Cornhusk Dolls*).

2. Make mosaic designs or pictures using Indian corn kernels.

3. Have children illustrate the story *The Origin of Corn* in the media of their choice.

4. Have children illustrate one of the legends relating to corn.

5. Make corncob pigs (See materials list).

C. Cooking Activities

1. Have students bring in recipes from home to compile a "Corn Recipe Book" to be distributed to students and teachers.

2. Prepare some recipes in class (May be from included recipes).

D. Reference Skills Activities

1. Have students compile a dictionary of new words relating to the history, production, and uses of corn.

2. Have groups of students research and report on the different technological uses of corn.

3. Have students research and prepare a collection of processed or manufactured items in which corn is a principle ingredient.

The Origin of Corn

A tale told by the Ojibwa Indians

This happened many moons ago. Men did not live where they do now. They lived in the East, on islands in the Great Water. Then enemies drove them from the islands. Enemies drove them to the West. There men lived and built their wigwam again. They made new fires. There, Living Statue came with his people. Living Statue was strong; O-wa-she, the Bear was his manitou, and so Living Statue was strong. When there were feasts, men wrestled each other. No man could throw Living Statue. Men wrestled with Living Statue from the rise of sun until mid-day. Men wrestled with Living Statue until the end of day. Living Statue could not be thrown. O-wa-she, his manitou, made him strong.

At night, Living Statue guarded the village so that no enemies could surprise his people. At sunrise he went out to hunt – no man was a greater hunter. Living Statue hunted and on his path as he walked in the forest, stood a little man.

"These hunting grounds are for my people," Living Statue said.

The little man laid down his bow and arrow. "We shall wrestle," he said, "and if I throw you, then these are my hunting grounds and you shall find a new place for your people. If you throw me, then these will be your hunting grounds."

"First we must smoke together," Living Statue said. And, he took his pipe and lighted it and gave it to the little man.

"We have agreed and smoked together," Living Statue said, "and it shall be as you have said."

The wrestling began – Living Statue was strong; O-wa-she aided him.

The little man was strong. He was a manitou. He was an evil manitou and evil is strong.

"O-wa-she," Living Statue called, "help me. O-wa-she, help me or I shall be thrown and my people will lose their hunting grounds."

O-wa-she heard the cry of Living Statue. Living Statue grew stronger.

"Wa-ge-me-na," Living Statue said, "I have thrown you, little man." And he laid his enemy on the ground.

Living Statue looked at the evil manitou where he lay. But he was no longer on the ground. There was only an ear of corn on a broken stalk.

"You have won, Living Statue," a voice said. Living Statue saw the red silk at the end of the ear of corn. It was like the red feather the little man had worn in his hair.

"Living Statue," the voice said, "take off the leaves that are wrapped around me. Break me into pieces, scatter me over the ground. Then go away. Tell no one what you have done. But when the summer leaves begin to fall, come back."

Living Statue waited three moons. The leaves colored and began to fall. He went back to the place where he had wrestled with the manitou. There stood a field of corn. It was ready to harvest.

So it was that Living Statue gave corn to his people.

From *The Earth Is On A Fish Back*, by Natalie Beetig. Holt, Rinehart and Winston, 1965.

Cooking With Corn

The following recipes all use cornmeal. They are adapted from original Indian recipes.

Indian Bread
(Makes 10 to 12 servings)

3	cups flour
1 3/4	cups cornmeal
1	teaspoon soda
2	teaspoons salt
1/4	teaspoon nutmeg
3 1/3	cups milk
1	cup molasses

1. Sift together the dry ingredients. Combine the milk and molasses.
2. Add the liquid ingredients to the dry ingredients, and beat with a rotary beater until smooth.
3. Pour into a well-greased, 2 quart steam mold, cover, and place on a rack in a deep kettle that has a close-fitting lid.
4. Pour enough boiling water into the kettle to come about halfway up the mold. Cover the kettle and steam the mold for three hours.
5. Remove the mold from the kettle, and let stand 20 minutes. Remove the cover and let stand 10 more minutes. Loosen the edges of the pudding with a spatula, invert the mold on a plate, and let stand until the pudding unmolds.
6. Serve with lots of butter.

(Woodman Indians of the East)

Corn Pone

1	cup cornmeal
1/2	teaspoon salt
1	teaspoon baking powder
2	tablespoons bacon drippings*

*Shortening may be used, but the bacon gives it a flavor of its own

1. Mix cornmeal, salt, and baking powder. Stir in bacon fat and milk.
2. Grease a large, heavy skillet with bacon drippings. Drop batter from a tablespoon, shaping into 4 pones. Brown on both sides. Serve with lots of hot butter.

Golden Corn Bread
(makes 8 to 10 servings)

2 cups milk
1 teaspoon salt
1 1/2 cups yellow cornmeal
3/4 cup butter or margarine
3 eggs, separated

1. Heat milk until just scalding. Stir in salt.
2. Quickly mix in cornmeal beating until smooth. Add butter or margarine, and blend in well.
3. Beat egg yolk with a fork and stir into the cornmeal mixture. Beat whites just until soft peaks form; gently fold into the batter.
4. Bake the bread in a greased 8" X 8" X 2" baking dish for 45 minutes in a moderate oven, 350° F.
5. Serve hot. Cut into squares, top with butter and wild honey or maple syrup.

(From the Planter Indians of the South)

The following are recipes from *Discovering Mexican Cooking*, by Alice Erie Young and Patricia Peters Stephenson, The Naylor Company, San Antonio, Texas, 1968.

Quesadillas
(makes 1 serving)

1 uncooked corn tortilla
1 slice cheese

Place cheese on tortilla, fold over, and press edge. It looks like a turnover. Cook lightly on a hot, ungreased skillet griddle, or in deep fat, until golden brown and the cheese melts.

For variety, put a tablespoon of filling such as refried beans, chile con carne, or chicken. Add cheese, fold over, press edge, and cook as above.

Tortillas are available almost everywhere and are inexpensive, but the children might enjoy making their own:

Corn Tortillas

2 cups Masa Harina
1 1/2 teaspoon salt
1 tablespoon shortening
2 1/2 cups boiling water

Mix dry ingredients in bowl. Melt shortening in the boiling water and add to the ingredients. Stir to make a stiff dough, using a spoon or a mixer.

Put ball of dough, about 1 inch in size, between damp muslin. Press with a flat surface as a plate....DO NOT ADD FLOUR. The tricky part is to get the tortilla off the muslin. Peel back the top of the muslin from the tortilla, and get it in your hand.

To cook, have slightly greased griddle very hot. Half-cook one side of tortilla (less than a minute), turn it over and cook until it is nicely brown in several spots and turn again. When it puffs up, press it down with a pancake turner.

Fun to make are Tacos:

Children can be grouped to –

Cut lettuce
Chop onions
Shread cheese
Fry the meat filling
Chop tomatoes

For taco shell –

Fry tortilla crisp in deep fat, keeping it folded with kitchen tongs

Fill the shell with meat filling, cheese, lettuce, and onions or tomatoes. Hot sauce may be used on top.

Another favorite that is easy to make is enchiladas:

Rolled Enchiladas
(six servings)

12 corn tortill
1 can red chi uce (enchilada sauce)
12 1/2 " cubes of cheese or 1 cup of cooked meat
Chopped onions and grated cheese to garnish

Fry tortillas lightly so they stay soft. Dip quickly into hot chile sauce. Fill with cheese or meat filling and roll. Place rolled enchiladas close together on baking dish. Pour some Red Chile Sauce over each roll and top with chopped onion and grated cheese. Place in hot oven, 400° F. Cook until cheese melts.

V. REFERENCE MATERIALS

A. Films

1. *Corn: The Plant With Ears,* (11 minutes) Dysart AV Center, No. 671.
2. *The Hopi Way,* Films Incorporated.
3. *Foods from Grain,* (11 minutes) Dysart AV Center, No. 53.
4. *Central Farming Region: Food for the Nation,* (14 minutes) Dysart AV Center, No. 5340.
5. *Great Plains: From Green to Gold,* (14 minutes) Dysart AV Center, No. 5341.
6. *Hopi Indian Village Life,* (11 minutes) Dysart AV Center, No 643.

B. Books

1. *Cornzapoppin',* Barbara Williams, Holt, Rinehart and Winston, 1976. Available at I.R.L., Arizona State University.
2. *Corn Is Maize,* Aliki, Thomas Y. Crowell Company, New York, Available at I.R.L., Arizona State University.
3. *The Story of Corn,* Peter Limburg, Julian Messner, New York.
4. *Mr. Picklepaw's Popcorn,* Ruth Adams.
5. *The American Indian As Farmer,* Morris Loverne.
6. *The Art of American Indian Cooking,* Yeffe Kimball and Jean Anderson, Doubleday and Company, Inc., Garden City, New York.
7. *Discovering Mexican Cooking,* Stephenson and Young, The Naylor Company, San Antonio, Texas.

C. Filmstrips

1. *Wheat and Corn,* Available from Eye Gate Company, No. H665J.
2. *Indians of Southwest,* Eye Gate Company, No. H237C.
3. *Farming in Pioneer Days,* Eye Gate Company, No. H666C.

PRE- AND POST-TESTS

UNDERLINE ONE ANSWER

1. Which of these is probably the most important American crop?

   a. oats b. corn c. wheat d. soybeans

2. The part of the corn that is very useful is the:

   a. stalk b. tassel c. leaf d. seed e. cob

3. Corn is pollinated by this means:

   a. birds b. people c. wind d. water

4. We would probably find this type of corn most often in the store's vegetable section:

   a. popcorn b. sweet corn c. flour corn d. waxy corn

5. Who eats most of the corn?

   a. cattle b. pigs c. people d. elephants

6. In which one of these products would corn be used?

   a. kool-aid b. alcohol c. coca-cola d. alka-seltzer

7. Underline another name for Indian corn:

   a. wheat b. cane c. sorghum d. maize

8. Farmers in the Midwest grind up the complete corn plant and store it in this building:

   a. barn b. garage c. silo d. shed

UNDERLINE ONE OR MORE WORDS

9. Which of these items may be made partly from corn?

   a. cloth b. sugar c. plastics d. medicine e. starch
   f. glass g. fertilizer

10. Which of these products made from corn would be manufactured rather than processed?

    a. paint b. polish c. starch d. explosives e. corn flakes
    f. plastics

11. There is probably no use for the corn's:

    a. silk b. cob c. smell d. stalk e. roots
    f. tassel g. kernel

METRICS – A "LITER" BIT EASIER

Bea Bempke, Tolleson School District
Dennis Bloomquist, Casa Grande School District
Sylvia Crook, Peoria School District
Adrienne Holtz, Pendergast School District
Mary McCoy, Pendergast School District
Verdun Trich, Somerton School District

Unit Grade Level
Second – Fourth Grades

Seventh Annual Migrant Institute 1976

METRICS – A "LITER" BIT EASIER

(Suggested Grades 2–4)

I. GOALS

A. To help children to understand the measuring concept

B. To expose children to the metric system

C. To show the difference between metrics and other measuring systems

D. To assist children in applying the metric system to their everyday lives

II. OBJECTIVES

A. The student will identify the following 7 metric terms:

1. Centimeter
2. Meter
3. Kilogram
4. Liter
5. Celsius
6. Milliliter
7. Millimeter

B. The student will match the 7 abbreviations to the 7 metric terms.

1. cm = Centimeter
2. m = Meter
3. kg = Kilogram
4. l = Liter
5. C = Celsius
6. ml = Milliliter
7. mm = Millimeter

C. The student will take some linear and mass measurements in metric terms and compare them to other measuring systems.

D. The student will record the temperature using the Celsius thermometer.

III. MOTIVATION

A. There will be a bulletin board containing metric terms applied to objects or pictures.

B. An introductory film or filmstrip will be shown (if available).

C. Primary metric coloring and activity books will be on display.

D. A metric mascot (a puppet, or a character selected and drawn by the teacher) will be on display to introduce the terms.

IV. SUGGESTED GROUPS

A. Four major areas of development:

1. linear
2. mass (weight)
3. capacity
4. temperature

V. ACTIVITIES IN SMALL GROUPS

A. Linear

1. length and width of the room
2. body measurements
   a. Draw yourself on paper and measure yourself
3. draw a map of your school.

B. Mass (weight)

1. fruit and vegetable day (weigh and eat)
2. consumer finds cans, etc. marked metric
3. weigh yourself on a metric scale

C. Capacity

1. consumer finds label and bottles (example: Coke and 7UP)
2. follow a recipe using metric terms
3. measure the water in the classroom aquarium

D. Temperature

1. keep a monthly chart using a Celsius thermometer
2. chilling and heating water
3. bake cookies and compare oven temperatures

VI. CHECK-UP PROCEDURES

A. Have children form their own process-type questions using metric terms.

B. A summary question sheet entitled "Certificate of Metric Skill Ability" could be used as a culminating unit activity.

1. using body measurements as reference points

C. Give the class a recipe written only in metric measurement and sample the results

VII. SUGGESTED FIELD TRIPS

A. Local hospital or clinic

1. Maryvale Samaritan Hospital
5102 West Campbell
Phoenix, Arizona
846-2211

2. Homako Hospital
Casa Grande, Arizona

B. Mines

1. ASRCO – Casa Grande

2. Hecla – Casa Grande

C. Local Grocery Store

1. Fry's Food Store
4216 West Bethany Home Road
Phoenix, Arizona
934-0000

2. Food Valley Market
9102 West Washington
Tolleson, Arizona
936-3234

D. Foreign Car Repair Shop

1. Three Stars Auto Service
7440 West Thomas Road
Phoenix, Arizona
849-4379

2. Westside Toyota
3909 West Indian School Road
Phoenix, Arizona
272-9451

VIII. REFERENCE MATERIALS

A. Arizona State University – Instructional Resource Laboratory

1. Activity Books:

Bitter, Dr. Gary G., *Metrics Fun and Coloring Book*, Curriculum Research and Development Group, University of Hawaii, 1975 (set of 4 color-coded booklets).

Gould, Carole, *Color Me Metric*, A. R. Davis and Company, P. O. Box 24424, San Jose, California 95154, 1973.

Metrics, Instructo–McGraw-Hill, Spirit Duplication Book.

2. Games:

Hampton, W. J., *Meter-Liter-Gram Game*, 26 Overlook Drive, P. O. Drawer 449-B, Warwick, New York 10990, 8-adult.

Long, Betty and White, Carol, *Metric Fun Activity Cards – Set A – Primary*, Palos Verdes Unified School District, Rolling Hills, California, 1974, Published by: Teachers, P. O. Box 398, Manhattan Beach, California 90266.

Metric-Q, Wholesome Learning Ways Ent., Los Angeles, California 90043, 1974.

Metrication, Metrix Corporation, Box 19101, Orlando, Florida 32814, 1973, 10-adult.

Metric-Tac-Toe, Great Ideas, Inc., 1973.

3. Teacher Aid Materials:

Gladstone, David and Gladstone, Joseph R., *Primary Mathematics Involvement Program Kit*, SRA-Science Research Associates, 1974.

Beginning Metric Measurement Learning Module, SVE-Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, Illinois 60614, Primary Level.

Metric-Survival Kit, Enrich, Inc. – Palo Alto, California 94306, 1975.

Project Mathematics Activity Kit – Primary, Winston Press, 25 Groveland Terrace, Minneapolis, Minnesota 55403.

Mr. Windbag, Educational Products, Inc. – EPI, 1211 West 22nd Street, Oak Brook, Illinois 60521.

4. Teacher Reference:

Activities Handbook for Teaching the Metric System, Dr. Gary Bitter, Mihiserl, Maurdeff.

B. Dysart – Florence – Gila Bend – Yuma

(See WACOP list of materials that are available)

C. Gila Bend

Filmstrip: *What is Measurement?* – S.V.E.C. 55019

D. WACOP – Westside Area Careers and Occupations Program

Measurement – Linear 3-A, W177, K-3

Measurement – Volume 3-B, W178, K-3

Metric Lab, KT548, Grades 3-6

Metric Measurement, KT565, Grades 2-3

Metric Mice, BK40, Grades 3-4

Metric Survival Kit, KT567, Grades 3-6

The Metric Box, M153, Grades 3-6

SEVENTH AND EIGHTH GRADE LEVEL

AFRICA, LAND OF CONTRASTS

(Grades six, seven and eight)

Committee:

Cayetano Acosta: ESL Teacher, Dysart
Shirley Bowman: Sixth Grade Teacher, Mohawk Valley
Don Brink: Migrant Consultant, State Department
Josie Herndon: Reading Teacher, Wellton
Wes Wesner: Principal, Somerton

FOURTH MIGRANT INSTITUTE – 1973

PRE AND POST TEST

HOW MUCH DO YOU KNOW ABOUT AFRICA?

1. Africa has three main climate areas. Cross out the one that does not belong:
   (a) Grasslands (b) Cold, frozen tundra (c) Hot, tropical rain forests (d) Deserts

2. Africa has three major racial groups. Cross out the one that does not belong:
   (a) Negroes (b) Arabs (c) White (d) Oriental

3. Circle the African country in which is found evidence of one of the earliest civilizations:
   (a) Rhodesia (b) Union of South Africa (c) Egypt (d) Tanzania

4. The longest river in the world is found in Africa. Circle its name:
   (a) Nile (b) Congo (c) Mississippi (d) Amazon.

5. The Union of South Africa is famous for its mining of two minerals. Circle them:
   (a) Lead and zinc (b) copper and silver (c) Tin and manganese (d) Gold and diamonds

6. The largest desert in the world is found in Africa. Circle it:
   (a) The Sahara Desert (b) The Gobi Desert (c) The Mohave Desert (d) The Great Sandy Desert

7. Three major religions predominate in Africa. Cross out the one that does not belong:
   (a) Buddhism (b) Christian (c) Moslem (d) Tribal religion

8. A large oil strike was recently made in Africa. Circle the name of the country in which this oil was discovered:
   (a) Chad (b) Kenya (c) Libya (d) Union of South Africa

9. Most of Africa is now independent, but one country still has large colonies there. Circle the name of this country:
   (a) Russia (b) Portugal (c) England (d) United States

10. Circle the name of an organized hunting party going after big animals:
    (a) Watusi (b) Zulu (c) Safari (d) Ticki-Ticki.

AFRICA, LAND OF CONTRASTS

(Grades six, seven and eight)

I. GOAL

A. To make the students aware of the tremendous contrasts in:

1. Culture: Arab, Negro and White peoples in Africa.

2. Climate: Desert, Grassland and Tropical rain forest areas.

3. Animal life: Herbivorous and Carnivorous types.

B. Motivation:

1. Display study prints from the Society of Visual Education, *Children of Africa.* ($8.00), and ask the students, "Which of these pictures are about Africa?"

2. Administer the pre-test to let the students know how much or how little they already know about Africa. (After the unit work is completed, this same test can be used for a post-test for evaluation purposes.)

3. Discuss with the students and list things that they would like to know about Africa.

C. Committee Work Possibilities:

1. Map Work

a. Map the three main climatic regions of Africa and illustrate the map with pictures depicting life in these regions.

b. Map locations and illustrate the major natural resources: rivers, minerals, lumber, etc.

c. Map habitats and illustrate types of wild animals.

d. Make comparison maps of Africa during colonial times and in the present.

2. Committee Activities

a. Study one of the three main racial groups of Africa: Arab, Negro or White; make stand-up dolls showing type of dress, followed with oral or written reports.

b. Study the wildlife found in one of the three major climatic areas: Desert, Grassland or Rainforest; illustrate through pictures, collages or murals.

c. Find out about minerals and mining in Africa: Gold, Diamonds, Copper, Oil and Bauxite; where are these found? Students may compare an African copper mine with an Arizona mine. Diagrams of a mine shaft may be made. Exportation of these minerals may be studied in relation to industry in Africa.

d. The history of Egypt may be studied: a Time Line may be made, or scale models of pyramids, etc.

e. Life along one of the four major rivers may be studied: Choose the Nile, Congo, Niger or Zambesi River and follow its course; the people, climates, etc., can be included in this study and presented by use of a salt-flour relief map, or by giving a scenic tour of the river.

f. One of the three major religions may be studied: Choose either Moslem, Christian or tribal religions and relate the religion to the race of peoples it applies to; students may write a skit about a major religious character, or make up a filmstrip type of presentation.

g. An individual tribe may be studied: The Zulu, Watusi, Bantu or Pigmy people are only a few to be suggested; a diorama, sculptures or customs and types of food and dress may be presented.

h. An individual country may be studied: The history of the country, or letters from pen-pals, or charts and graphs showing industry or types of people, etc. may be given.

i. The slave traffic may be studied: travel routes could be mapped, or the African history of slave trade noted.

D. Additional Activities

1. African masks made from paper mache.

2. Weapons and tools modeled from clay or cardboard.

3. Dioramas of dwellings and life styles, animal habitats, etc.

4. Bulletin board displays of maps and illustrations.

5. Wire sculpture depicting African or primitive art.

6. Current events scrapbooks or newspapers about Africa.

7. Construction of a general scrapbook about Africa.

(Any of the activities suggested in sections C or D may be interchanged or substituted according to group interest.)

E. Evaluation:

1. Observe participation in group work or individual students.

2. Evaluate product of individual committees.

3. Ask each committee to submit three questions about the most important aspects of their topic. Questions may be used in a group contest.

4. Administer the post-test.

F. Culminating Activities:

1. Prepare a program for presentation over television of reports and demonstrations from various committees.

2. Present a program or open house for interested classes.

3. Display unit products and reports in the school library or other appropriate places.

NOTES AND ADDITIONS:

BIBLIOGRAPHY

Africa. T. K. Butcher.

Africa. William D. Allen. Fideler Company, 1966.

Africa: Awakening Giant. Sidney Lens. Putnam Company.

Africa: Geography of a Changing Continent. J. M. Prichard. Grades 9-12 (513 N 8419-007) Africana Publishing Company.

African Kingdoms. Basil Davidson and the Editors of Time-Life Books. Silver Burdett Company, 1966.

All About the Jungle. Armstrong Sperry. Random House, 1959.

An Alphabet of Ancient Egypt. Mary Chubb. Watts International, (Great Britain), 1966.

A Glorious Age in Africa. Daniel Chu and Elliott Skinner. Doubleday and Company, 1965.

Continent in a Hurry. Ella Griffin. Coward-McCann Company.

Finding Out About Geography – North Africa and the Near East. Robert Clayton. Golden Press, 1968.

Follett Classroom Atlas. Follett and Company, 1968.

Getting to Know Africa. Sam Alden. Coward-McCann Company.

Great Day in Ghana – Kwasi Goes to Town. Geraldine Kaye. Abelard-Schuman, 1962.

How People Live in Africa. Mary E. Crieg. Benefic Press, 1963.

Lands and People of the World: Africa, Australia, Oceania. Vol. 5, Grolier, Inc., 1967.

Let's Travel in Nigeria and Ghana. Glen D. Kittler. Children's Press, Inc., 1965.

Let's Travel in the Congo. Glen D. Kittler. Children's Press, Inc., 1965.

Let's Visit Middle Africa. J. C. Caldwell. John Day Company, 1968.

Let's Visit Our Neighbors in Africa. J. C. Caldwell. John Day Company, 1968.

Let's Visit South Africa. J. C. Caldwell. John Day Company, 1968.

Let's Visit West Africa. J. C. Caldwell. John Day Company, 1968.

My First Geography of the Suez Canal. Arensa Sondergaard. Little, Brown and Company, 1969.

Rand McNally Answer Atlas. Rand McNally, 1968.

BIBLIOGRAPHY (cont'd)

Stanley African Explorer. Fredrika Shumway Smith. Rand McNally Company, 1968.

The Congo, River Into Central Africa. Red Schroeder. Garrard Publishing Company, 1964.

The First Book of Africa. Langston Hughes. Franklin Watts, Inc.

The First Book of Ancient Egypt. Charles Alexander Robinson, Jr., Franklin Watts, Inc., 1961.

The Golden Picture Atlas – Africa. (Book 5) Golden Press, 1960.

The Illustrated Book About Africa. Felix Sutton. Grossitte Company.

The Land and People of South Africa. Alan Poston. Lippincott.

The Lands and People of East Africa. Benfield Baker. M. A. Macmillan and Company.

The Nile – Lifeline of Egypt. Violet Weingarten. Garrard Publishing Company, 1964.

The Nile: The Story of Pharaohs, Farmers and Explorers. Ruth Warren. McGraw-Hill, 1968.

Visual Geography Series – Ethiopia. Alfred Acqucye. Stirling Press, 1970.

FILMSTRIPS

Encyclopedia Britannica: 2429 Teagarden Street, San Leandro, CA 94577, (Tel. 415-483-8220)

Animals and Birds
Animals and Smaller African Animals

Birds of the Tropical Forests

Cats of the Tropical Forests
Contrasts in Nigeria

Highlands of Kenya

King of Beasts

Land of the Tropical Forests
Larger Animals of Africa
Life Along the Congo River
Life Along the Nile
Life and Death on the African Plain

Mammals of the Tropical Forests
Modern Egypt
Monkeys of the Tropical Forests

Native Tribes

FILMSTRIPS (cont'd)

Oasis in Libya

Plants and Flowers

Reptiles and Amphibians of the Tropical Forests

The Bantu in South Africa
The Region

Eye Gate House Inc.:

The Story of the Negro-American

Free Filmstrips and Slides:

These require only return postage and insurance (if any) paid. Be sure to order at least four weeks in advance.

1. *South Africa – Conservation and Development* (1971)

   Part I *The Land*
   Part II *The People*

   Order from: Bear Films, Inc., 805 Smith Street, Baldwin, NY 11510.
   (Wall charts and student leaflets may also be ordered. Teachers MAY KEEP this filmstrip.)

2. *Refugees in Africa* (Slides in color)
   (Tells about victims of political upheavals.)

   Order from: Sterling Films, 2221 Olive Street, Los Angeles, CA 90007.

3. *The Creative Past: Art of Africa* (78 slides in two parts)
   (Shows the development of African Art from 300 B.C. to early 20th Century.)

   Order from: National Gallery of Art, Extension Service, Washington, DC 20565.

FILMS

Born Free (Movie)

Somerton Library:

310	*Africa – An Introduction*	I-J
478	*African Animals*	P-I
341	*Boy of Central Africa*	I-J
100	*Life of Nomad Peoples – Desert Dwellers*	I
247	*Mammals of Africa and India*	I

FILMS (cont'd)

Free Films: (16mm. Order well in advance. Require return postage.)

Africa (240 min. Sound/Color 1967)
A panoramic view of Africa. May be shown in two parts.

Order from: 3M Company, Miss Clara Charles, Film Lending Service 220–6W, 2501 Hudson Road, St. Paul, MN 55119.

The Haj (30 min. Color/Sound)
Pilgrimmage to Mecca from all over the world.

Order from: Farm Film Foundation, 1425 H Street N.W., Washington, DC 20005.

The following seven films come from the same source; however, only one per year may be ordered due to demand. Be sure to order well in advance.

Egypt: 5000 Years	(Sound/Color	20 min.)
Egyptian Beaches	(Sound	24 min.)
Cairo, A New Skyline	(Sound	10 min.)
Cairo: One Thousand Minarets	(Sound/Color	20 min.)
New Horizons	(Sound	10 min.)
This is Egypt	(Sound	25 min.)
Summertime–Wintertime	(Sound/Color	25 min.)

About Egyptian tourist attractions.

Order from: Egyptian Government Tourist Office, 630 Fifth Avenue, New York, NY 10030.

STUDY PRINTS

Children of Africa (Set SP–131 $8.00)

Order from: Society for Visual Education, 1345 Diversey Parkway, Chicago, IL 60614

TRANSPARENCIES

Encyclopaedia Britannica

Africa, Past and Present	Units I, II, and III
Africa, The Land	
Africa, The People	

RECORDS

"Children of Africa," from Silver Burdett

POPULAR MUSIC

"Kumbayah"

BOOKS FOR YOUNG READERS:*

Albert Schweitzer: Genius of the Jungle. Joseph Gollomb. Vanguard, 1949. (Portrait of a great man.)

Born Free. Joy Adamson. (Paperback edition.)

Boy of the Pyramids; A Mystery of Ancient Egypt. Ruth Fosdick Jones. Random House, 1952.

Cow-Tail Switch, and Other West African Stories. Harold Courlander and George Herzog. Holt, Rinehart and Winston, 1947. (Humorous folk-tales.)

David Livingstone, Foe of Darkness. Jeanette Eaton. Morrow Company, 1947. (A man who loved and served Africa.)

Elephant Herd. Miriam Schleim. Scott, Inc.

Fire on the Mountains and Other Ethiopian Stories. Harold Courlander, George Herzog and Leslau Wolf. Holt, Rinehart and Winston, 1947. (Humorous folk-tales.)

Here is Africa. Attilio Gatti and Elen Morgan Gatti. Scribner, 1943.

Kamanda, An African Boy. Attilio Gatti. McBride, 1953. (True story of a Belgian Congo boy.)

Lion Boy: A Story of East Africa. Alden Gifford Steven. Lippincott, 1938.

Living Free. Joy Adamson. (Paperback edition.)

Look Out for the Ostriches! Tales of South Africa. Jan Juta. Knopf, 1949. (Stories from the author's childhood.)

On Safari. Theodore J. Waldeck. Viking Press, 1940.

Pepperfoot of Thursday Market. Robert Davis. Holiday, 1941. (A Berber boy and his donkey.)

Picken's Exciting Summer. Norman Davis. Oxford Press, 1950.

Picken's Great Adventure. Norman Davis. Oxford Press, 1950. (The everyday life and adventures of a chief's son.)

The Gift of the River: A History of Ancient Egypt. Enid La Monte Meadowcroft. Crowell, 1947.

The Secret of the Hawk. (Slave trade in Africa.)

Treks Across the Veldt. Theodore J. Waldeck. Viking, 1940.

---

*Suggested by World Book Encyclopedia and Compton's Encyclopedia.

FIRST AID

A Unit For 6th, 7th, and 8th Grades

Committee:

Janice Brandt, Avondale
Carol Fain, Coolidge
Carolyn Lisman, Somerton
Mary Jean Reese, Maricopa
Nan Stoner, Somerton

First Aid Unit
Grades 6, 7, 8

I. GOALS

A. To prepare students to act in emergency situations.

B. To provide knowledge of emergency services available.

C. To expose children to careers available in health fields.

II. OBJECTIVES

A. Students will know what course of action to follow in emergency situations.

B. Students will be aware of careers in the health field.

C. Students will be able to list and describe various emergency services in their area.

III. MOTIVATIONAL ACTIVITIES

A. Pre-test

B. Students will be provided the opportunity to take their own temperature and read the thermometer. (The school nurse can provide several if it is not flu season)

C. Role-Playing. Pre-planned emergency situations simulated in the classroom or playground.

D. Bulletin Boards. Use materials listed under materials and other materials available.

E. Display First Aid kits.

F. Provide filmstrips (see materials) and previewers for interest centers.

IV. SUGGESTED COMMITTEES

A. Poisoning, choking

B. Drowning, shock

C. Heat-related problems

D. Bites, stings

E. Burns

F. Cuts

G. Falls, broken bones, bruises, sprains

H. Special situations, epileptic or heart attacks

V. SUGGESTED GROUP AND WHOLE CLASS ACTIVITIES

A. Role-playing and demonstration

1. slings
2. artificial respiration
3. bandaids
4. bandages
5. burns
6. cold compresses

B. Displays and Bulletin Boards (see resources)

C. Resource People

1. For help, call your County Career Center

Pinal County:
Career Education Department
Central Arizona College
Coolidge, Arizona

a. Life guard – local city government
b. Health Department:
Pinal County Department of Health
Florence, Arizona
c. Ambulance Company:
Aztec Ambulance Company
Casa Grande, Arizona

d. Paramedics:
   Rescue Squad
   Casa Grande Fire Department
   Casa Grande, Arizona
e. Local school nurse

D. Field Trips

1. County Health Department, Florence, Arizona
2. Clinic – Hoemako Doctors' Clinic, Casa Grande, Arizona
3. Burn Unit, Memorial Hospital, Phoenix, Arizona
4. Emergency Room, Hoemako Hospital, Casa Grande, Arizona
5. Rescue Unit, Casa Grande Fire Department, Casa Grande, Arizona
6. School Nurse's Office – your school

E. Locate news and related items concerning first aid from:

1. newspapers
2. T.V.
3. radio
4. magazines
5. textbooks
6. reference books

PRE- AND POST-TEST

To be given orally, but could be used as written or group activity.

1. What would you do if you were babysitting and the baby you were caring for seemed warm, cried and wouldn't go to sleep?

2. What would you do if you were shopping and the person with you fainted?

3. What would you do if your little brother swallowed something such as some of your mother's cleaning liquids?

4. What would you do if someone was drowning?

   a. close to shore

   b. far out in the water

5. What would you do for a bee sting? An insect bite?

6. How would you treat a burn?

7. How would you treat a cut?

8. What would you do for someone who was choking?

9. How (or where) would you get help in an emergency?

10. Name any other emergency you might come across and tell how you would handle it?(Example – Animal bite, broken bones, puncture wound)

FIRST AID SEARCH

P R E S S U R E P O I N T O B
O Z R O I N T M E N T E O R D
I N O R M A L I N L M Y U A R
S C O M P O U N D E E I R L E
O O T Q L A I K T P S S N C S
N N N U E L N I C E P A I H S
S C I N F E C T I O N L Q O I
A U L S R T A H I T H T U C N
I S P R A I N C S D B S E L G
R S S E C B E T H T O R T A D
E I E Z T S U N A T E T F J I
T O I U U O M A T C H R E T A
C N B A R A R T I F I C I A L
A Y A G E R M I C I D A L L S
B I R C I T P E S I T N A O E

ALCOHOL
ANTIDOTE
ANTISEPTIC
ARTIFICIAL
BACTERIA
BITE
BRUISE
COMPOUND
CONCUSSION
DRESSING
EMETIC
GAUGE
GERMICIDAL
INFECTION
LESION
MATCH
NORMAL
OINTMENT
POISONS
PRESSURE POINT
RABIES
SALT
SHOCK
SIMPLE FRACTURE
SPLINT
SPRAIN
STERILE
TETANUS
TOURNIQUET

RESOURCES

FILMS

Note: Please be polite and follow the directions. If people abuse the privilege, these free films will be made unavailable.

The following films are from *The Educator's Guide to Free Films*. It is asked that you follow this procedure when ordering films:

1. Requests should be made on official stationery.
2. Requests should be made by teachers, not students.
3. Requests should mention *The Educator's Guide to Free Films*.
4. Requests should be made well in advance. Two alternate dates should also be given.
5. Requests are to be made to the address given.

Breath of Life

Mouth-to-mouth resuscitation, 16mm, 16 minutes, sound. American Heart Association – obtain from local or state Heart Association. Borrower pays transportation charges. Book three weeks ahead.

Cardiopulmonary Resuscitation, Recent Developments and Emergency Care

16mm, 20 minutes, sound. Ayerst Laboratories, Mr. Robert Clough, Jr., Director of Audiovisual Services, 685 Third Avenue, New York, New York 10017. Borrower pays no postage. Book 8 weeks ahead. Return after three days by U. S. mail.

Chance to Save a Life

Mouth-to-mouth resuscitation, 16mm, 14 minutes, sound. American Heart Association – obtain from local or state Heart Association. Borrower pays transportation charges. Book 3 weeks ahead.

Child Safety Is No Accident

16 mm, 13 minutes, sound (available only to 7th grade and above). Modern Talking Picture Service, 1145 North McCadden Place, Los Angeles, California 90038. Borrower pays only return postage. Book at least 1 month ahead.

In Time to Live

General life support techniques, 16mm, 18 minutes, sound. American Heart Association – obtain from local or state Heart Association. Borrower pays tranportation charges. Book 3 weeks ahead.

Life on the Line

Emergency care systems, 16mm, 20 minutes. American Heart Association, obtain from local or state Heart Association. Borrower pays transportation charges. Book 3 weeks ahead.

Standard First Aid Series

16mm, 270 minutes, sound. This is a series of 10 films, 27 minutes each. American National Red Cross. Most can be obtained from the local Red Cross Chapter. If not, contact: General Supply Office, American National Red Cross, 18th and "E" Streets, N.W., Washington, D.C. 20006. Borrower pays return postage. Book 2 months in advance.

That They May Live

16mm, 24 minutes, sound. Artificial respiration. Amalgamated Meat Cutters and Butchers, Workmen of North America, Department of Education, 2800 North Sheridan Road, Chicago, Illinois 60657. Pay return postage (U.S. Mail – Special Handling). Book 6 weeks ahead and give alternate date.

For the following films, mention *Elementary Teachers' Guide to Free Curriculum Materials* and use school stationery.

Mountain and Desert Survival

Desert Survival (TF 5571b). 16mm, 31 minutes, sound. Department of the Air Force, Air Force Central Audio Visual Library, Aerospace Audiovisual Service, Norton Air Force Base, California 92409. Postage is paid by the Department of the Air Force. Book 3 weeks in advance.

Mouth-to-Mouth Resuscitation

(TV 495) 16mm, 28 minutes, sound. Department of the Army, Fort MacArthur, California 90731. Borrower pays transportation charges one way. Book well in advance. Must be ordered with special forms.

Mouth-to-Mouth Resuscitation in J.H.S.

(10566) 16mm, 16 minutes, sound. Ayerst Laboratories, Mr. Robert T. Clough, Jr., Director of Audiovisual Services, 685 Third Avenue, New York, New York 10017. Borrower pays no postage charges. Book 8 weeks in advance. Return 3 days after receipt.

Techniques of Exhaled-Air Artificial Respiration

(FTA 458), 16mm, 11½ minutes, sound. Department of the Air Force, Air Force Central Audio Visual Library, Aerospace Audiovisual Service, Norton Air Force Base, California 92409.

When Seconds Count

16mm, 4 minutes, sound. American National Red Cross, your local Red Cross Chapter or General Supply Office, American National Red Cross, 18th and "E" Streets, N.W., Washington, D.C. 20006. Borrower pays return postage. Book 2 months in advance.

Dysart Film Library, 977-7281, Ext. 45. Use special order forms.

The Life You Save, 5450, 17 minutes.

How to Save a Choking Victim. 320, 11 minutes.

Filmstrips – Dysart Media Center

Safety on the Streets

Living in the Machine Age

Safety in the Home

Safety at School and at Play

Books

First Aid in Illness and Injury, American Red Cross

First Aid in Illness and Injury, Anthony Greenback

Safety Can Be Fun, Lippincott

Health and Safety for You, Harold Diehl, Webster Division of McGraw-Hill

Charts and Pamphlets

Mention *Elementary Teachers' Guide to Free Curriculum Materials* and use school stationery.

First Aid in the Home, 10 copies free, extra–5¢ each. Department P. Council on Family Health, 633 Third Avenue, New York, New York 10017.

First Aid Facts Chart, Classroom supply, fits in medicine cabinet. Johnson and Johnson, Anne Williams, Consumer Services, New Brunswick, New Jersey 08903.

Nard Poison Prevention Kit, 1 free, 2 or more–$1.00. The National Association of Retail Druggists, One East Wacker Drive, Chicago, Illinois 60601.

Rescue Breathing to Save a Life, English or Spanish, leaflet, American Heart Association, 44 East 23rd Street, New York, New York 10010.

Note: These materials were found in looking through catalogs, but check the catalogs in your own school.

CHILDREN'S PROJECTS

WEAVING, CREATIVE STITCHERY (EMBROIDERY) AND SPOOL KNITTING

BY
NAN STONER, SOMERTON

SEVENTH ANNUAL MIGRANT INSTITUTE – 1976

Note: These crafts should be taught separately at first and then once learned, they can be used as interest centers.

I. GOALS

A. To give the student a deeper knowledge and appreciation of how our clothes are made.

B. To expose the children to a variety of materials used in weaving.

C. To expose the children to a variety of simple crafts.

D. To provide learning situations, so that the high interest student can develop skills for finding reference materials.

E. In studying Arizona History, the students will become aware of some of the history of weaving through the Indian Crafts, including Basket Weaving.

II. OBJECTIVES

A. The student will be able to make a cardboard loom and to do some of the basic weaves.

B. The student will be able to do some simple embroidery stiches on some type of cloth.

C. The student will be able to learn the procedure for Spool Knitting and make a simple project.

D. The high interest student will be able to do reference work in the area of weaving.

E. In studying Arizona History, the interested student might possibly do some simple basket weaving.

III. MOTIVATION

A. Go to a cotton field and get some raw cotton. Compare with cotton bought in the store and cotton material.

B. Have a display of different types of cloth, yarns, embroidery threads and weaving materials.

C. Have bulletin boards showing the different crafts and the possible things to make.

D. Have charts and pictures around the room of the different crafts.

E. Bring some Indian Baskets to class. Discuss how they resemble grass. Discuss the types of materials to use in making a basket.

F. Have a table for looking at books on the crafts.

G. If you can get some looms – display them.

H. Show available films, slides and filmstrips.

IV. COMMITTEE AND GROUP WORK

A. Paper weaving with construction paper.

B. Make a cardboard loom and do some simple weaves.

C. Basket weaving

D. Reference work, as a possible follow-up, for enrichment.

1. History of weaving
2. History of God's Eyes (Ojo de Dios)
3. Kinds of looms
4. Spinning and Dying
5. Basket weaving

E. Do a creative stitchery project

F. Do a spool knitting project

V. EVALUATION

A. Observe the child working on his project.

B. The child should be able to name the weaves or creative stitches that he used.

C. The child should be able to describe how he made his project.

D. The child should be able to name and possibly tell something about the different types of yarns, threads or materials that he used.

VI. CONCLUDING ACTIVITIES

A. Display the student's work in the school library.

B. Enter some of the student's work in the County Fair.

C. Written and oral reports for the students who did some reference work.

VII. FIELD TRIPS

A. Cotton field

B. Cotton gin

C. Clothing factory

D. Visit someone or a museum that has different types of looms. In Yuma, such places would be: Arizona Western College art department, Museum at the Territorial Prison, Quechan and Cocopah Indian Reservations and Yuma Fine Arts Association.

VIII. RESOURCES:

P=Primary, I=Intermediate, J=Junior High, S=Senior High

A. Slides are available through Arizona Highways. Must purchase.

B. Filmstrips:

1. *Where Clothes Come From*
2. *Materials for Clothing*
3. *How Cloth Is Made*
4. *The Clothing Factory*

C. Films:

1. *Textiles In the Making* (G316), 16mm sound, 14½ minutes, Junior High and above, Assoication–Sterling Films, 7838 San Fernando Road, Sun Valley, California 91452. (Book at least 10 weeks in advance – give two alternate dates)
2. *Cotton Farmer: Our Changing Way of Life*, I, J
3. *Cotton in Today's World*, I, J, S
4. *Fiber in Art*, Churchili, I, J, S
5. *Cloth: Fiber to Fabric*, P
6. *Clothing: A Pair of Blue Jeans*, P, I
7. *Loom*, P, I, J
8. *Colonial Life and Crafts*, I, J, S
9. *Spinning Wheel*, P, I, J, S

D. Bibliography:

1. *Embroidery for Children*, Ann-Mari Kornerup, Van Nostrand Reinhold Company, New York 10001, 1969
2. *McCall's Crafts: Children's Projects*, Volume I, 1976, pp. 50, 51, 52, and 53.
3. *McCall's Needlecraft Magazines*, They usually have two issues a year, Fall-Winter and Spring-Summer
4. *Byways In Handweaving*, Mary Meigs Atwater, Macmillan Company
5. *Everybody's Weaving Book*, Alfred Allen Lewis, Macmillan Publishing Company, Inc., 1976
6. *Finger Weaving: Indian Braiding*, Alta R. Turner, Little Craft Book Series, Sterling Publishing Company, Inc., New York, 1974
7. *Inkle Loom Weaving*, Frances B. Smith, Little Craft Book Series, Sterling Publishing Company, Inc., New York, 1976
8. *McCall's How To Weave It Book*, Editors of McCall's Needlework and Crafts, McCall Pattern Company, New York 10017, 1973
9. *Off-Loom Weaving Book*, Rose Naumann and Raymond Hull, Charles Scribner's Sons, New York, 1973 (Good book for learning the different weaves).
10. *Off Loom Weaving*, Little Craft Book Series, Sterling Publishing Company, Inc., New York
11. *Simple Weaving*, Grete Kroncke, Van Nostrand Company, New York, 1973
12. *Step-by-Step Weaving*, Neil Znamierowski, Golden Press, New York, 1967
13. *Weaving Off Loom*, Donna Z. Meilack and Lee Erlin Snow, Henry Regnery Company
14. *Weaving on Cardboard*, Marthann Alexander, Taplinger Publishing Company, New York, 1976
15. *Weaving Without A Loom*, Sarita R. Rainey, Davis Publishers, Inc., Worcester, Massachusetts, 1966
16. Sunset Publishing Company has a couple of books out on weaving.
17. *The Story of Cotton*, National Cotton Council of America, P. O. Box 12285, Memphis, Tennessee 38112 (This is a pamphlet for the students; they also have other free materials)

Procedures for the Children's Projects

Weaving:

Materials: Materials used in weaving should be a variety, have character and color. Use yarns (especially rug and craft yarns), jute, embroidery floss, cable cord, twine, sisal cord, strips of material (drapery fabric or scraps of material left over from sewing), nylon loopers, plastic bags, beads, shells, spools, etc.

Warp: Warp should be smooth and strong. Stay away from white as it bleeds. Makes weft threads lighter.

Other supplies: Loom of some type, beater (can be a fork – students use fingers easily), crochet hook, scissors, tapestry needle (hair pin can easily be used in the primary grades).

Procedure:

1. Make a cardboard loom
2. Dress the loom (put on the warp threads).
3. Begin weaving with the plain or tabby weave.
4. Vary the weaves, by learning new ones.
5. End with several rows of plain or tabby weave.
6. Take off loom.

Weaving Vocabulary

Basket Weave: Over and under two warp threads.

Beater: Device for pressing down filling, after each row is woven.

Beating: Pressing down filling, after each row is woven.

Bi-Colored Weft: Using two yarns of different colors at the same time.

Bobbin: A spool for holding filling material to be passed through open shed. Also called a shuttle.

Chain: A series of loops made in the warp after it has been wound on the warping device.

Dressing the Loom: Preparing the warp on a loom for weaving.

Filling: Weft.

Frames: Hand-made loom.

Ghiordes Knots (yor-deez): Piece of yarn about 4" – lay across two warp threads, bend the two ends down, under, and bring up between the two warp threads. Slide knot down until it is snug against the previous row of weaving, pull ends to tighten. Go across row. If doing more than one row of Ghiordes Knots, do two rows of tabby between each row. Alternate, one row of knots, then two rows of tabby.

Weaving Vocabulary (continued)

Hand Spun: Yarn spun by hand on a spinning wheel rather than by machine; it is less regular than commercial yarn.

Leno: An open weave in which pairs of warp ends cross each other and thereby lock the weft threads in position.

Loom: The loom is a device that holds the warp ends or threads taut, so that a shed or opening can be formed. Through this shed the filling or weft, is passed and the interlacing process between warp and filling are achieved. There are simple and complex looms.

Pick: A single weft thread.

Plain weave: The simplest order of interlacing: the weft goes under, over, under the warp, reversing the order on the return row. Also called tabby.

Selvage: Side edge of a woven piece of cloth.

Shed: The space created when certain warp ends are raised above certain others, to allow the weft threads to pass through.

Shuttle: Device for holding filling material, to be passed through open shed. Also called a bobbin.

Soumak (soo-mak): Weft over four warp threads and back under two, and so on across the loom. Easiest to do from left to right, although may be done from right to left.

Tabby: Plain weave.

Tapestry needle: A blunt needle with a large eye to hold the yarn in order to weave.

Warp: The lengthwise threads, held taut by the loom, through which the weft is woven.

Warp-faced: A weaving in which the warp yarns are more visible than the weft yarns.

Weave: The interlacing of ends and picks, in a particular order.

Weaving: The interlacing of lengthwise threads (warp) with crosswise threads (weft).

Weaving draft: The draft that indicates the weaving pattern.

Weft: The crosswise threads, woven into the warp.

Weft-faced: A weaving in which the weft yarns are more visible than the warp yarns.

Woof: Weft.

Wrapping: A weaving technique in which the weft thread is passed completely around the warp.

Suggestions for the order in which the children should learn the weaves. Plain or tabby, basket, bi-colored weft, soumak, ghiordes knot, chain, tapestry (laid-in-technique), laces (Leno, Mexican, Sapnish), wrap bundles (wrapping).

Stitchery:

Materials:

Yarn or embroidery thread, needles, scissors, embroidery hoop or wooden frames (optional – depends on the type of material you are using) and supplies for transfers.

Transfers:

Iron on, soft lead pencil (free drawing), tracing wheel and dressmakers' carbon, coloring books; pins to pin picture on fabric – can pull off when finished.

Procedure:

Children can create wall hangings of realistic scenes or abstract designs while learning some of the basic embroidery stitches. Using bright-colored yarn on burlap makes the work seem so much less "sissified" to the boys in the class than if the traditional colors were used and the finished results blend well with the modern decor of today's homes.

Spool Knitting:

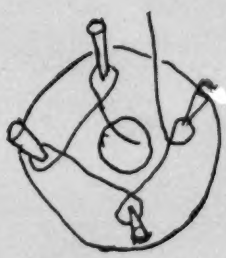
Materials:

A spool, four short nails, one longer nail, a hammer, and a ball of yarn.

Procedure:

Thinking of the top of the spool as a clock face, drive in the short nails at 12, 3, 6, and 9 O'clock. Thread the end of the yarn through the hole in the spool, letting about four inches of "tail" extend below the spool. Thread this knitting loom as shown in the example below.

Example:



Lay a second strand of yarn on the outside of the first nail. Using the longer nail as a working tool, pick up the lower strand, lift it up over the nail head, and drop it on the inside of the nail.

Example:

Step 1
Pick up bottom strand

Step 2
Lift it over nail head

Step 3
Drop it on other side of nail

Then lay a second strand of yarn around the outside of the second nail, and work as before. Continue knitting in this manner, around and around the spool, until the work reaches the desired length.

To finish, break off yarn, leaving 10-12 inches of unknit yarn extending. Knit the next nail in turn, as usual. Then insert the nail under the loop still remaining on that nail. Pull this loop until the free end of the yarn comes through. Repeat in turn on each of the next three nails. Pull the loose yarn end tight, and cut it off close to the finished knitting. Then pull the knitting down and out of the spool loom.

Example:

"Horse Rein Zoo"

According to the directions, the spool should have six nails. Other materials needed are: chenille pipe cleaners, 12 inches long, four white, one black, one green, and cotton.

Turtle:

For top of shell, make horse rein tube 27" long. Wind into oval dome about 2" high; shape while sewing edges of tubes together. For bottom of shell, work on only three adjacent nails, making a tube 22" long. Wind and sew into oval disk. For legs, make four tubes each, 2" long; sew foot end flat. Cut two white chenille stems in half. Fold each piece in half; insert folded end into open end of each leg. For neck and head, make 4¼" tube. Turn under ¾" at one end and sew to make head (this will not be stuffed). Cut chenille stem in half, fold in half. Insert folded end in open end of neck. Fill out head and neck with cotton. To complete head, make two ½" tubes; sew along sides of head. For tail, work only three adjacent nails for 2½". Stuff top of shell. Sew bottom side of shell to edges of top, inserting head, legs, and tail in place. Be sure to catch all pieces securely. Using contrasting color yarn, embroider markings on back, eyes, eyelids, and mouth.

Snail:

Using three adjacent nails, make a 24" tube for shell. Wind and sew into high dome shape about 1½" in diameter at largest coil; stuff. For body, make two 3½" tubes; sew together lengthwise and at ends. Insert 3" length chenille stem through one end of body; bend ends up to make antennae. Wrap antennae ends with yarn. Sew shell to center of body. For shell markings, use contrasting yarn and work a coiling line in outline stitch.

Octopus:

For body, make 21" tube. Coil and sew into dome shape 2¾" tall and 1¼" diameter at bottom, leaving small length of tube free at wider end to form flat base. Stuff dome, then coil flat base to finish. To make tentacles, use three adjacent nails to make eight 6½" tubes; sew one end of each to base. Embroider mouth and eyes.

Ladybug:

Body is made of two tubes, one 4¼", the other 2¾". Sew each into a loop. Sew smaller loops together to form oval. Sew smaller loop into center of larger loop. For bottom of bug, use three adjacent nails to make a 7" tube of black yarn. Coil into oval to fit body top. For legs, cut and bend three 2" chenille pieces; insert evenly-spaced across narrow width of bottom. Stuff top; sew to bottom, keeping legs in place. For head, use four nails to make a 1" tube; sew to one end of body. Using straight stitch and contrasting yarn, embroider eyes on head. Shell division line is one long straight stitch going from back edge almost to head. Add spots.

Green worm:

Make 11" tube, but do not remove from nails. Stuff slightly at bottom end to make head. Insert whole chenille stem almost down to head. Continue working, but decrease one stitch every third round. To decrease, slip two loops to one nail and treat both loops as one. Make three decreases until three loops remain. Work two more rounds using three loops; bind off. To complete head, make two 1" tubes to sew to sides of head. Embroider on mouth and eyes.

Butterfly:

Using four nails, make a 2¾" tube for body. Sew across one end to make flat tail. Make antennae in head end as for Snail. For larger pair of wings, make two 4" tubes and two 1" tubes of contrasting colors. Form 4" tubes into teardrop-shaped loops; loop and sew smaller tubes inside 4" tubes. For smaller pair of wings, make two 2½" tubes; coil and sew each into circle. Sew a small and a large wing on each side of body, placing large wing over edges of small wings. Tack on two 1" chenille for feet.